PROCEEDINGS

OF THE

MADRAS GOVERNMENT

IN THE

PUBLIC WORKS DEPARTMENT,

BUILDINGS AND ROADS BRANCH,

PUBLIC WORKS SECRETARIAT
22-V-91
OOTACAMUND.

FOR THE

MONTH OF MARCH 1891.

Printed by Authority.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.
1891.

INDEX

TO THE

TABLE OF CONTENTS AND TABULAR STATEMENT OF MISCELLANEOUS PROCEEDINGS AND MATTERS OF ROUTINE,

BUILDINGS AND ROADS,

FOR THE MONTH OF MARCH 1891.

	—	Page.
A		
Artesian well at Ongole	Regular.	8
Administration report, Public Works Department, North-West Provinces	Routine.	2
Accountant for the North Arcot division	Routine.	3
Allotment	Routine.	4
Accountant Aiyodda Ramayya	Routine.	9
Accident at the Collector's office, Coimbatore	Routine.	11
Attenders for the Public Works Secretariat	Routine.	16
Abd-ur-razzaq Sahib	Routine.	18
B		
Bridge Mahaliaputty—, Vizagapatam division	Regular.	4
Buildings at Ramandrug.—Transfer of — to the Military Works Department	Regular.	10
Bridges for the Vayitri-Gúdalúr road	Regular.	10
Ballacut for the Pondugal Ferry, Kistna district	Routine.	4
Bridge on the Kandawalli road, Godávari district	Routine.	4
Bridge Thalavasal, Salem district	Routine.	4

	—	Page.
Bengal Barrack Regulations	Routine.	5
Bridges for the Vayitri-Gúdalúr road	Routine.	6—13
Bridge over the Mahasingi river	Routine.	8
Bi-monthly return of stores, &c.	Routine.	8
Boat Superintendent at Bezváda	Routine.	15
Bridge on the Kandavalli road	Routine.	18
Books of forms	Routine.	19
Bauloo Naick	Routine.	22
C		
Cricket Pavilion at Chepák	Regular.	2
Coach-house and stables for the Marine Villa, Madras	Regular.	3
Colonel H. M. Vibart	Regular.	4
Completion reports	Regular.	11
Collector's office at Calicut	Routine.	2
Charges for Provincial works.—Budget estimate of —	Routine.	7
Correspondence	Routine.	7, 18, 21
Collector's Cutcherry at Trichinopoly.—Repairs to the old —	Routine.	8
Centerings of the Pennér bridge	Routine.	8
Captain H. E. Goodwyn, R.E.	Routine.	8
Colored glass for the new Law Courts	Routine.	9
Conservation of archæological works	Routine.	9
Collector's office, Kurnool	Routine.	9
Colonel W. H. Burton, R.E.	Routine.	11
Cook-house for light-keepers in Armeghon	Routine.	12
Cooum river.—Improvements to the —	Routine.	15
Coonoor drainage scheme	Routine.	18
Colonel R. R. E. Drake-Brockman, R.E.	Routine.	18
Clerk for the Chingleput division	Routine.	19
Captain H. D. Love, R.E.	Routine.	20
Colonel J. Pennycuick, R.E.	Routine.	21, 25
Colonel S. C. Clarke, R.E.	Routine.	21
Conductor J. Kelley	Routine.	21

	—	Page.
Contractor Y. Nagiah Naidu	Routine.	23
Copper tape for the Public Works Stores division	Routine.	23
Cundasawmy Gownden, Y.	Routine.	24
Cemeteries in the Tranquebar Fort	Routine.	24
Central Jail, Salem	Routine.	24
D		
Draftsman for the West Coast division	Regular.	2
District Munsif's Court at Aska, Ganjam	Regular.	3
District Munsif's Court at Karempudi	Regular.	4
Deputy Tahsildar's office and sub-jail at Gajapatinagar	Routine.	4
District Munsif's Court at Márkápur	Routine.	11
District Munsif's Court at Karúr	Routine.	13
Dates of receipt of accounts for January in the Examiner's office ...	Routine.	14
Daily payments to famine laborers	Routine.	16
District Munsif's Court, Aska	Routine.	24
E		
Establishment required for No. I Periyár division	Regular.	9
Engineering works in Europe.—Permission to officers on furlough to visit —	Regular.	10
Establishment required for the Tank Restoration Scheme	Regular.	11
European prison buildings at Ootacamund	Regular.	11
English stores.—Local purchase of —	Routine.	1, 8, 15, 19. 20, 23
Expenditure on stores in the Public Works Department, Madras, for 1889-90	Routine.	2
Examination rules.—Exemption from —	Routine.	2
Erratum	Routine.	
Expenses incurred in landing teak logs ex. S.S. *Puttiala*	Routine.	8
Estate works in Ganjam	Routine.	8
Establishment disallowance items	Routine.	19
Ethirajulu Moodaliar, M.	Routine.	23
Erratum	Routine.	25

	—	Page.
F		
Famine Relief works.—Programme of —	Regular.	8
Fifty-fire years' order	Routine.	5
Fort St. George.—Annual report on —	Routine.	17
Famine relief works.—Civil agency works suitable for —	Routine.	18
G		
Groynes at Negapatam	Regular.	1
Guntúr Church	Regular.	9
Grants for all minor and petty works of the Military Works Department	Regular.	9
Goods shed at Tuticorin	Regular.	11
Grant for the Civil Works sub-division, Ganjam	Routine.	5
Grant for Provincial civil works	Routine.	7
Guaranteed appointments to passed students of the College of Engineering, Madras	Routine.	13
Grant for the Kistna Western division	Routine.	14
Government Publications	Routine.	15
Government of India Public Works Department Circulars issued in 1890	Routine.	20
Gratuitous Relief in North Arcot district	Routine.	21
H		
Head Assistant Collector's residence at Hospet —	Regular.	2
Hospital Assistant for the Wynaad Sub-division	Routine.	11
Hail storm at Belgaum	Routine.	16
I		
Indents for stores	Regular.	5, 7, 10
Iron record racks	Regular.	7
Imperial Civil works in Madras	Routine.	10
Indian Army List	Routine.	16
Irrigation works in Tiruvallúr taluk	Routine.	19

	—	Page.
J		
Jail at Rajahmundry.—Central —	Regular.	1
Jail.—District — at Rajahmundry	Regular.	3
Jail.—Párvatipur Hill —	Regular.	9
Jail at Párvatipur	Routine.	8—21
Jarada estate	Routine.	8
Jubilee Museum buildings at Bezváda	Routine.	19
K		
Kálahasti zemindari.—Famine relief works in —	Routine.	13, 15, 20, 25
Kothandapany Moodelliar, V	Routine.	15
L		
Light-houses.—Report of Superintending Engineer, VI Circle, on certain —	Regular.	4
Latrine for coachmen and horsekeepers at the new Law Courts ...	Regular.	7
Location of Public Works	Regular.	8
Loan to the Kálahasti Zemindar	Routine.	1
Light-house at Manapad	Routine.	3
Light-house at the Seven Pagodas	Routine.	3
Lime.—Manufacture of —	Routine.	5
Lawn Tennis Court, Civil Engineering College	Routine.	7
Lock Hospital Building at Ranipet	Routine.	10
Lieut.-Colonel A. C. Smith, R.E.	Routine.	11
London supplies.—Additional allotment for—	Routine.	15
List of surplus Public Works Stores	Routine.	19
Location of various Public Works in the Presidency	Routine.	20
Lieutenant J. Lalor	Routine.	23
M		
Madras Harbour Works.—Amended estimate for the —	Regular.	4
Madras Harbour Works.—Foreshore north of the —	Regular.	4

	—	Page.
Madras Harbour Works.—Progress report, —	Regular.	5
Mountstuart buildings at Ootacamund	Regular.	7
Mr. J. E. Paul	Routine.	1
Major W. L. C. Baddeley, R.E.	Routine.	1
Mr. C. J. Ussher	Routine.	1
Mr. J. P. Davidson	Routine.	2
Mr. C. J. Plummer	Routine.	4
Mr. Wilson	Routine.	4
Mr. A. S. Russell	Routine.	4
Mr. C. J. K. Watson	Routine.	6—14
Mr. Ashpital	Routine.	10—16
Madras Harbour Works.—Railway materials for the —	Routine.	11
Mr. J. A. Roe	Routine.	11
Mr. Lambert, Executive Engineer	Routine.	13
Mr. Haldwell	Routine.	14
Mr. J. Hannan	Routine.	15
Mr. Mackenzie	Routine.	15
Modifications of allotments	Routine.	17—25
Muthoo Pillay	Routine.	22
Messrs. Romilly and Howley	Routine.	24
Mr. de Winton	Routine.	24
N		
Nagaruthnam Naicker, temporary surveyor	Routine.	9
O		
Old Palace at Chandragiri	Regular.	6
Office for the Deputy Commissioner, Southern Division, Salt and Abkári Department	Regular.	7
Old Taluk Cutcherry at Budwail	Regular.	11
Overseer Grieff	Routine.	22

	—	Page.
P		
Police station at Ennore	Regular.	2
Payments to famine laborers	Regular.	8
Pioneer lines at Trichinopoly	Regular.	9
Periyár Project.—Steamer, &c., for the —	Regular.	9
Public buildings, Kistna district.—Funds for certain —	Regular.	11
Provincial establishment.—Grant for —	Routine.	3
Plates of Technical Art Series	Routine.	7
Párvatipur Hill Jail	Routine.	8—21
Post office at Anantapur	Routine.	9
Public holidays	Routine.	10
Period of election for leave rules.—Extension of the —	Routine.	12
Postage due on census papers	Routine.	13
Palaneandy	Routine.	18
Periyár jurisdiction	Routine.	19
"*Place of Arms.*"—Building occupied as — at Vellore	Routine.	20
Post offices at Udayagiri and Balliguda	Routine.	23
Q.		
Quarters of the Serjeant Instructor of the Wynaad Company of the Malabar Volunteer Rifles at Vayitri	Regular.	3
Quarters for the Lighthouse-keeper at Point Calimere	Routine.	3
Quarters of the Serjeant Instructor, South Indian Railway Volunteers, Negapatam	Routine.	10
R.		
Rents of buildings.—Alterations in the rates of —	Regular.	3
Road from Poolla to Malikmahomedpur, Godávari district	Regular.	5
Rents to be charged to the Civil Apothecary and Accountant on the Periyár works	Regular.	5
Returns submitted by Executive Engineers to other departments ...	Regular.	6
Relief works in the Cuddapah district	Regular.	8
Relief works in the Chingleput district	Regular.	9
Revised form of muster roll and daily report	Routine.	1
Revised budget estimates.—Modifications in —	Routine.	3

	—	Page.
Road No. 26 to Kallimodu, Tanjore district	Routine.	4
Road across the Kistna anicut	Routine.	5
Road to Mulliyar head in the Tanjore district	Routine.	5
Road.—Vayitri-Gúdalúr —	Routine.	5, 19
Reports on Native newspapers	Routine.	6, 17
Rules regulating temporary works establishment under Executive Engineers	Routine.	6
Revised estimate of Incorporated Local Funds for 1890-91	Routine.	7
Roman Catholic Church at Pallávaram	Routine.	7
Red Hills water for carrying out tests for observation of spirits ...	Routine.	9
Reformatory School at Chingleput	Routine.	10
Raghavendra Naidu	Routine.	10
Reports for the Secretary of State.—Administration and Departmental.	Routine.	11
Road dam on the Arni-Wandiwash road	Routine.	11
Relief works, Nellore district	Routine.	12
Rules.—Period of election for leave —	Routine.	12
Relief works, Kálahasti	Routine.	12
Road.—Potinghi-Koraput —	Routine.	13
Rent for the Collector's residence at Salem	Routine.	15
River.—Improvements to the Cooum —, Madras	Routine.	15
Rent of Westmere Cottage, Ootacamund	Routine.	17
Ryves' canal	Routine.	18
Record racks	Routine.	19
"*Rollers*" employed in the office of the Examiner, Public Works Accounts	Routine.	21
Rent for the Vizagapatam division office	Routine.	23
Road from Ichápur to Jarada	Routine.	25
S		
Sub-divisions.—Inspection of —	Regular.	1
Statement of road communications	Regular.	1
Shed for witnesses at the District Munsif's Court, Tirukoilúr ...	Regular.	2
Steam fire-engine for the Chepâk buildings	Regular.	2
Special Assistant Collector's quarters at Malapuram	Regular.	2

	—	Page.
Secretariat office on Stonehouse Hill at Ootacamund	Regular.	5
Sea Customs office at Kilakarai, Madura district	Regular.	5
Schedules of military works requirements	Regular.	6
Stamp and Stationery office, Madras	Regular.	6
Sub-divisions of the North Arcot division	Regular.	7
Sub-Registrar's office at Manantoddy	Regular.	10
Sanitary Engineer for Lower Burma	Routine.	2
Sluice on the canal bank at Kotapilli, Godávari district	Routine.	2
Surrenders	Routine.	5, 10
Suspense account	Routine.	5, 6, 14
Steam launch for the Narsápur canal	Routine.	7
Syed Akbar, late lock lascar, I Circle	Routine.	7
Statement of payments made in England for stores, &c.	Routine.	9
Storekeeper, No. II Periyár division	Routine.	9
Salary.—Payments of — of late Chinnathumby Pillay, Sub-Engineer.	Routine	9, 12
Suspense Accounts of 1890-91	Routine.	10
Sub-Registrar's office buildings at Negapatam.—Demolition of the old —	Routine.	10
Students of the Engineer and Subordinate grades.—List of passed — forwarded by the Government of India	Routine.	11
School-house at Anantapur	Routine.	12
Season.—Report on the state of the — in Chingleput	Routine.	12
Sub-Registrar's office at Musiri	Routine.	13
Sub-division of the Periyár division	Routine.	15
Suit	Routine.	15, 25
Steam launch for the Narsápur canal	Routine.	16
Statement of objectionable items	Routine.	17
Service books	Routine.	17
Sub-Registrar's office at Bimlipatam	Routine.	19
Sales of land under Act II of 1890	Routine.	20
Sadananda Pillay	Routine.	21
Staff Serjeant's quarters at Ellore	Routine.	21
School of Arts, Madras	Routine.	22
Stationery	Routine.	22

	—	Page.
Sub-Registrar's office at Madanapalle	Routine.	22
T		
Taluk Cutcherry at Gurayala, Kistna district	Regular.	5
Teachers' College, Saidápet	Regular.	6
Temporary establishment for the Kálahasti sub-division	Regular.	10
Tahsildar's Cutcherry at Gunnavaram, Kistna district	Routine.	2
Transfer of funds	Routine.	2, 3, 4, 5, 9, 14, 18, 23, 24, 25
Telegraph signallers' quarters and Post office at Bangalore	Routine.	3
Temporary clerk, Chingleput division	Routine.	4
Telegraph office at Madras	Routine.	6
Taluk office at Ellore	Routine.	7
Tank on the west side of Government House	Routine.	12
Telephone lines	Routine.	16, 20, 21, 23
Tunnel drilling machinery	Routine.	16
Temporary establishment for the office of Examiner, Public Works Accounts	Routine.	18
Tamaracheruvu Tank	Routine.	20
Tools.—Unserviceable — in the Cuddapah division	Routine.	21
Telegraph office at Madras	Routine.	23
Tread mills at the Penitentiary	Routine.	23
U		
Unanswered reference list, I Circle	Routine.	12
Upper subordinates appointed to be in charge of an Executive Engineer's office.—Allowance to —	Routine.	16
V		
Venkataramayyer	Routine.	2
Venkata Row, B	Routine.	11
Victoria Gosha Hospital, Madras	Routine.	22
Venkatasawmy Iyer, V.	Routine.	22
Veerappen	Routine.	24

	—	Page.
W		
Wooden record racks	Regular.	8
Water-supply and drainage of Berhampore	Routine.	3
Water-supply of the Lawrence Asylum, Ootacamund	Routine.	4
Watchman for the Benhope rest-house on the Ootacamund-Kullar road	Routine.	11
Water-supply of Cuddalore	Routine.	13
Westmere Cottages, Ootacamund	Routine.	17
Waterman for the office of the Chief Engineer for Irrigation	Routine.	23
X		
Y		
Z		

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

TABLE OF CONTENTS,

BUILDINGS AND ROADS,

FOR THE MONTH OF MARCH 1891.

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Central Jail at Rajahmundry.—Estimate of Rs. 2,680 for improvements to the —, sanctioned.	1891. 2nd Mar. No. 568 W.	...	9th April 1890, No. 1776 C. 26th May 1890, Nos. 186-87 D. 4th June 1890, No. 216 D. 12th July 1890, No. 434 D. 31st July 1890, No. 2085 W. 8th Jan. 1891, No. 81 C.
Sub-divisions.—Reports from the Examiner, Public Works Accounts, bringing to notice that certain — had not been inspected for more than six months, communicated to Superintending Engineers concerned for inquiry and report.	2nd Mar. No. 569 W.	...	......
Groynes at Negapatam.—Passing orders regarding the construction of —.	2nd Mar. No. 586 W.	...	......
Statement of road communications.—Ordered that the — maintained by the public authorities in the Madras Presidency for 1888-89 and 1889-90 be forwarded to the Government of India.	3rd Mar. No. 600 W.	...	......
Forwarded	3rd Mar. No. 601 W.	...	......

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Head Assistant Collector's residence in Hospet.—Proceedings, Revenue Department, directing to prepare plans and estimates for constructing a new building for a —, communicated to the Superintending Engineer, III Circle, with remarks.	1891. 3rd Mar. No. 602 W.	...	7th Aug. 1888, No. 2970 C. 21st May 1889, No. 1365 W. 22nd Nov. 1890, No. 4842 C. 12th Jan. 1891, No 122 C. 8th Jan. 1891, No. 82 C. 5th Jan. 1891, No. 16 W.
Shed for witnesses in the compound of the District Munsif's Court at Tirukoilúr, South Arcot District.—Estimate of Rs. 1,125 for constructing a —, sanctioned.	3rd Mar. No. 603 W.	...	23rd Mar. 1889, No. 870 W. 10th Oct. 1890, No. 2660 W.
Draftsman.—The entertainment of a second class — in the West Coast division, sanctioned.	3rd Mar. No. 604 W.	...	11th Feb. 1890, No. 713 C. 1st Mar. 1890, No. 1116 C. 12th Mar. 1890, No. 1345 C. 9th April 1890, No. 1074 W. 10th Feb. 1891, No. 719 C.
Steam Fire-engine required for the protection of the public offices in Chepák, Madras.—Ordered that the indent for a — be forwarded to the Home Government.	3rd Mar. No. 605 W.	...	......
Indent forwarded to the Home Government.	3rd Mar. No. 606 W.	...	......
Copy of the above forwarded to the Government of India.	3rd Mar. No. 607 W.	...	......
Special Assistant Collector's quarters at Malapuram.—Estimate of Rs. 5,070 for improvements to the —, sanctioned.	5th Mar. No. 622 W.	...	19th Dec. 1890, No. 3389 W. 5th Jan. 1891, No. 10 W. 26th Jan. 1891, No. 242 W.
Cricket Pavilion at Chepák, Madras.—Estimate of Rs. 13,440 for the construction of a new —, sanctioned, and Rs. 2,000 appropriated for the work.	6th Mar. No. 636 W.	...	15th Jan. 1891, No. 177 C. 17th Nov. 1890, No. 3066 W.
Police station at Ennore.—The transfer to the Postal Department of the old —, sanctioned with remarks.	6th Mar. No. 637 W.	...	14th Aug. 1890, Nos. 2223-24 W. 17th Sept. 1890, No. 2490 W. 4th Oct. 1890, No. 2597 W.

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Quarters of the Serjeant Instructor of the Wynaad Company of the Malabar Volunteer Rifles at Vayitri.—Estimate of Rs. 3,990 for re-constructing the —, sanctioned.	1891. 6th Mar. No. 638 W.	...	11th July 1889, No. 1845 W. 5th Feb. 1890, No. 857 C. 20th Feb. 1890, No. 933 C. 24th Mar. 1890, No. 1594 C. 27th Mar. 1890, No. 1653 C. 11th April 1890, No. 1086 W. 2nd June 1890, No. 2452 C. 21st Nov. 1890, No. 4812 C.
Rents.—Letter from the Government of India sanctioning the proposal that in all cases in which alteration in the rates of — is involved by the application of the existing rules, the revised rate shall have effect from the date on which notice of the same is served on the occupant, communicated to officers of the Public Works Department.	6th Mar. No. 648 W.	...	22nd May 1889, No. 248 W. 22nd May 1889, No. 1367 W. 31st Oct. 1889, No. 3077 W. 8th Sept. 1890, Nos. 2417-18 W. 16th Dec. 1890, No. 5257 C. 8th Dec. 1890, Nos. 3253-54 W. 19th Dec. 1890, No. 3389 W. 5th Jan. 1891, No. 10 W. 16th Jan. 1891, No. 228 C. 4th Feb. 1891, Nos. 320-21 W.
Rents.—The Government of India addressed regarding cases in which the rates of — should be revised under the existing rules, &c.	6th Mar. No. 649 W.	...	......
Jail at Rajahmundry.—The transfer of two rooms of buildings No. 1 in the old District — to the Salt and Abkári Department, sanctioned.	7th Mar. No. 660 W.	...	12th April 1888, No. 1097 W.
Coach-house and stables for the Marine Villa, Madras.—Estimate of Rs. 3,131 for constructing a —, sanctioned.	9th Mar. No. 665 W.	...	......
District Munsif's Court at Aska, Ganjam District.—Passing orders regarding the construction of the —.	9th Mar. No. 669 W.	...	16th Jan. 1884, No. 137 W. 29th Aug. 1889, No. 2388 W. 14th Jan. 1891, No. 114 W. 10th Feb. 1891, No. 743 C / A.

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Mahalimputty bridge, Vizagapatam Division.—Revised estimate of Rs. 5,150 for constructing the — on the Potinghi-Koraput road, sanctioned.	1891. 9th Mar. No. 675 W.	...	23rd May 1887, No. 1394 W. 25th Mar. 1889, No. 887 W. 5th Sept 1889, Nos. 2467-68 W. 7th Nov. 1889, No. 3162 W.
Colonel H. M. Vibart, R.E.—Ordered that the Secretary of State for India be addressed regarding the six months' extension of leave on medical certificate granted to —.	10th Mar. No. 682 W.	...	......
Despatch to the Secretary of State on the above.	10th Mar. No. $\frac{6}{682}$ W.	...	......
Lighthouses.—Proceedings, Marine Department, passing orders on letter from the Presidency Port Officer making certain remarks on the inspection report of the Superintending Engineer, VI Circle, on certain —, communicated to the Superintending Engineer for information and guidance.	10th Mar. No. 688 W.	...	......
District Munsif's Court-house at Karampudi, Kistna District.—The transfer of the — to the Forest Department, sanctioned.	12th Mar. No. 707 W.	...	10th Jan. 1891, No. 104 W.
Madras Harbour Works.—Orders reviewing the amended estimate for the — and recommending it for the formal sanction of the Right Honorable the Secretary of State for India.	13th Mar. No. 718 W.	...	19th Aug. 1889, No. 2277 W. 28th Aug. 1889, No. 2370 W. 2nd Mar. 1889, No. 622 W. 1st July 1889, No. 1737 W. 9th Jan. 1890, No. 54 W. 26th May 1890, Nos. 1460-61 W. 19th Sept. 1890, No. 2508 W. 16th Feb. 1891, Nos. 426-27 W. 16th Feb. 1891, No. 428 W. 27th Feb. 1891, No. 554 W.
The above forwarded to the Government of India.	13th Mar. No. 719 W.	...	......
Foreshore north of the Madras Harbour Works.—Estimate of Rs. 1,55,462 for extending the rubble revetment protecting the —, sanctioned.	13th Mar. No. 720 W.	...	16th Feb. 1891, No. 426 W. 16th Feb. 1891, Nos. 425-426 W. 27th Feb. 1891, No. 554 W.

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Secretariat offices on Stone House Hill, Ootacamund.—Estimate of Rs. 5,300 for improvements to the —, sanctioned.	1891. 13th Mar. No. 721 W.	...	23rd Mar. 1891, No. 1109 C.
Sea Customs office at Kilakarai, Madura district.—Estimate of Rs. 3,260 for imports to the —, sanctioned.	13th Mar. No. 722 W.	...	......
Road from Poolla to Malikmahamudpur, Godávari district.—Estimate of Rs. 7,410 for constructing a —, sanctioned.	13th Mar. No. 723 W.	...	......
Madras Harbour Works.—Progress report of the — for the month of January 1891, recorded.	13th Mar. No. 724 W.	...	12th Jan. 1891, No. 106 W.
Indent for stores required by the Public Works Department in 1891-92.—Ordered that the — be forwarded to the Director-General of Stores.	14th Mar. No. 743 W.	...	......
The above forwarded to the Director-General of Stores.	14th Mar. No. 744 W.	...	......
Copy of the indent forwarded to the Government of India.	14th Mar. No. 745 W.	...	......
Rents to be charged to the Civil Apothecary and Accountant on the Periyár works.—Reply of the Government of India to a reference regarding —, communicated, with remarks, to the Examiner, Public Works Accounts.	14th Mar. No. 746 W.	...	5th Feb. 1889, No. 564 C. 2nd Mar. 1889, No. 1059 C. 23rd Mar. 1889, Nos. 874-875 W. 12th June 1889, No. 1561 W. 9th Aug. 1889, Nos. 2148-49 W. 6th Aug. 1889, No. 2479 W. 26th Nov. 1890, No. 4890 C. 7th Jan. 1891, No. 57 W. 12th Feb. 1891, Nos. 395-396 W. 23rd Jan. 1891, No. 399 C. 9th Mar. 1891, No. 1294 C.
Taluk Cutcherry at Gurayala, Palnád taluk, Kistna district.—Passing orders on estimate submitted by the Revenue Department for the construction of a —.	14th Mar. No. 747 W.	...	9th June 1890, No. 1593 W. 27th Oct. 1890, No. 2849 W. 8th Nov. 1890, No. 461 R. 7th Jan. 1890, No. 69 C.

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Returns submitted by Executive Engineers to officers of other departments.—The Superintending Engineer, I Circle, directed to omit certain statement from the list of —.	1891. 14th Mar. No. 748 W.	...	31st Oct. 1889, No. 3078 W. 19th April 1890, No. 1150 W. 17th Nov. 1890, No. 3060 W. 14th Feb. 1891, Nos. 412-13 W.
Copy of the above forwarded to the Government of India.	14th Mar. No. 749 W.	...	......
Old Palace at Chandragiri, North Arcot district.—Report on the present state of the —, communicated to the Public Department, with remarks.	14th Mar. No. 750 W.	...	16th Feb. 1885, No. 310 W. 23rd Mar. 1885, No. 731 W. 5th Dec. 1889, No. 3468 W. 13th Nov. 1889, No. 5267 C.
Schedules of Military Works requirements.—Orders on Circular from the Quartermaster-General issuing instructions in connection with the preparation and submission of the — for inclusion in the Imperial Military Works budget estimate of the financial year 1892-93, and subsequent years.	14th Mar. No. 751 W.	..	......
Teachers' College, Saidápet, Madras.—Estimates for additions and improvements to the —, sanctioned, with remarks.	16th Mar. No. 762 W.	...	9th July 1888, No. 2068 W. 26th Nov. 1890, No. 4888 C. 10th July 1890, No. 1877 W. 7th Jan.. 1891, No. 79 C.
Talavasal Bridge, Salem district.—Revised estimate of Rs. 47,700 for completing the —, sanctioned.	16th Mar. No. 763 W.	...	24th Oct. 1888, No. 3395 W. 19th Feb. 1889, Nos. 499-500 W. 22nd May 1889, No. 1429 W. 30th July 1889, No. 2050 W. 18th Nov 1889, No. 3273 W.
Stamps and Stationery office, Madras.—Cancelling the sanction accorded for extending the — and directing the Consulting Architect, in communication with the Superintendent of Stamps and Stationery and the Board of Revenue, to draw up a decision and estimate for a new building on the site of the existing office.	16th Mar. No. 764 W.	...	18th Dec. 1889, No. 3593 W. 17th Dec. 1890, No. 3366 W. 27th Mar. 1890, No. 984 W. 17th Jan. 1891, No. 290 C.

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
	1891.		(*Continued*). 4th Feb. 1891, No. 599 C. 5th Dec. 1891, No. 637 C.
Iron Record Racks.—Reports regarding — for the District Courts of Chingleput and Coimbatore, communicated to the Judicial Department, with remarks.	16th Mar. No. 765 W.	...	11th Mar. 1889, No. 1240 C. 20th Sept. 1889, No. 2616 W. 12th Dec. 1890, No. 5198 C. 10th Feb. 1891, No. 386 W.
Mount stuart buildings at Ootacamund—Passing orders regarding the proposed extension of the —.	17th Mar. No. 767 W.	...	6th Feb. 1889, No. 333 W. 24th Sept. 1891, No. 4278 C. 13th Aug. 1889, No. 679 D. 8th Feb. 1890, No. 423 W. 22nd April 1890, No. 1194 W.
The Government of India addressed on the above.	17th Mar. No. 768 W.	...	......
Latrine for coachmen and Horsekeepers at the New Law Courts, Madras.—Estimate of Rs. 1,016 for constructing a —, sanctioned.	17th Mar. No. 769 W.	...	17th Sept. 1890, No. 2489 W. 7th Feb. 1891, No. 351 W.
Office for the Deputy Commissioner, Southern Division, Salt and Abkári Department.—The Superintending Engineer, VI Circle, directed to prepare an estimate for adopting a wing of the Bombproof, Infantry Barracks, at Trichinopoly as an —.	17th Mar. No. 770 W.	...	......
Indents.—Proceedings, Financial Department, recording Despatch from the Secretary of State sanctioning compliance with certain —, communicated to officers concerned.	17th Mar. No. 771 W.	...	4th Oct. 1890, No. 2598 W. 20th Oct. 1890, No. 2767 W. 20th Oct. 1890, No. 2764 W. 3rd Nov. 1890, No. 3004 W.
Sub-divisions of the North Arcot division.—The proposed re-arrangement of the —, sanctioned.	17th Mar. No. 772 W.	...	13th Nov. 1890, Nos. 3024-25 W. 9th Oct. 1890, No. 2649 W. 12th Aug. 1890, No. 2276 W. 7th Mar. 1891, No. 1263 C.

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Artesian well at Ongole.—The Superintending Engineer, II Circle, directed to submit an estimate for boring an experimental — and to arrange with the Superintending Engineer, VI Circle, for the transfer to Ongole of the boring plant at Tuticorin.	1891. 17th Mar. No. 773 W.	...	20th May 1889, No. 1351 W. 22nd Nov. 1889, No. 3532 W. 26th Nov. 1889, No. 3550 W. 18th Nov. 1889, No. 3078 W. 4th Dec. 1890, No. 3211 W. 15th Dec. 1890, No. 3329 W. 16th Feb. 1890, No. 433 W. 20th Feb. 1891, No. 967 C.
Payments to Famine Laborers.—Directing that — should be made at frequent intervals and daily payments only when desired by the Collector.	17th Mar. No. 774 W.	...	......
Relief Works in the Cuddapah district.—Proceedings, Revenue Department, directing the speedy preparation of estimates for certain —, communicated to the Superintending Engineer, III Circle, and to the Chief Engineer for Irrigation.	18th Mar. No. 785 W.	...	......
Famine Relief Works.—Proceedings, Revenue Department, requesting the Commissioner of Revenue Settlement, Land Records and Agriculture to call upon the Collector of the districts which have suffered from drought to submit their programme of — and to get ready the estimates for such works, and directing to supplement irrigation works found insufficient in the affected districts by Local Fund Works, communicated to officers concerned.	19th Mar. No. 795 W.	...	......
Wooden Record Racks.—The type plan of — and stepladder for taluk offices, approved and ordered to be circulated to officers and departments concerned.	19th Mar. No. 802 W.	...	29th July 1889, No. 2032 W. 20th Nov. 1889, No. 3288 W. 5th Dec. 1889, No. 5710 C. 20th July 1890, No. 495 D.
Location of Public Works.—Ordered that the Government of India be informed of the best means of ascertaining the exact — in the Madras Presidency.	19th Mar. No. 805 W.	...	......
The Government of India addressed on the above.	19th Mar. No. 806 W.	...	......

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Relief works in Chingleput district.—Proceedings, Revenue Department, directing that additional — should be commenced at once and carried on departmentally, communicated to the Chief Engineer for Irrigation, with remarks.	1891. 19th Mar. No. 808 W.	...	......
Steamer, &c., for the Periyár Project.—Forwarding the copy of the inspection notes on the Periyár Project Works by Colonel Pennycuick, R.E., Chief Engineer, Public Works Department; and requesting to allow Colonel Pennycuick while in England on privilege leave, to select the —.	19th Mar. No. 809 W.	...	......
Guntúr Church.—Letter from the Government of India defining Rule XI, Part IV of the revised Ecclesiastical Rules, and stating that no Government contribution is admissible for the —, communicated to the Ecclesiastical Department.	20th Mar. No. 810 W.	...	18th Sept. 1883, No. 2628 W. 3rd Nov. 1883, No. 3116 W. 11th Dec. 1889, No. 5810 C. 16th April 1890, No. 1121 W. 5th Dec. 1890, Nos. 3224-25 W.
Establishment required for No. I Periyár Division.—The — during 1891-92, sanctioned.	21st Mar. No. 827 W.	...	......
Pioneer lines at Trichinopoly.—Ordered that the Government of India be addressed on the subject of an allotment for reconstructing the roof of hospital wards Nos. 12 and 13 of the 1st —.	21st Mar. No. 828 W.	...	22nd Dec. 1890, Nos. 3411-12 W. 6th Feb. 1891, No. 347 W.
The Government of India addressed accordingly.	21st Mar. No. 829 W.	...	......
Grants for all Minor and Petty works of the Military Works Department.—Letter from the Government of India deciding to invest the Director-General of Military Works with the control of the — from the ensuing financial year; and laying down the method of adjustment of expenditure on such works, and on Minor and Petty works situated within Public Works divisions and undertaken by the Public Works Department, communicated to officers concerned.	21st Mar. No. 830 W.	...	......
Parvatipur Hill Jail and Sub-Jail buildings at Koraput, Vizagapatam district.—Proceedings, Judicial Department, passing orders regarding proposals for improving the —, communicated to the Superintending Engineer, I Circle, with instructions	23rd Mar. No. 844 W.	...	11th April 1890, No. 1084 W. 7th Jan. 1891, No. 49 W. 6th Mar. 1891, No. 654 W.

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Sub-Registrar's office at Manantoddy, Malabar district.—Revised estimate of Rs 7,610 for constructing a —, sanctioned.	1891. 23rd Mar. No. 846 W.	...	22nd Oct. 1888, No. 2491 W. 9th May 1888, No. 133 W. 21st July 1888, No. 2230 W. 26th April 1889, No. 1123 W. 27th Jan. 1891, No. 457 C.
Buildings at Rámandrug.—Passing orders regarding the transfer of the Provincial — to the Military Works Department for upkeep and of the Provincial portion of the roads to the Local Fund Board.	23rd Mar. No. 847 W.	...	21st Dec. 1889, Nos. 3545-46 W. 28th May 1890, No. 1487 W. 9th Sept. 1890, No. 2422 W. 26th Jan. 1891, No. 246 W.
Engineering works in Europe.—Letter from the Government of India communicating orders of the Secretary of State regarding proposals for allowing selected officers of the Public Works Department while on furlough to visit — for purposes of improving their professional knowledge, communicated to officers of the Public Works Department.	23rd Mar. No. 848 W.	...	15th Sept. 1873, No. 2267. 7th Aug. 1875, No. 2284. 24th Dec. 1875, No. 3595. 31st Aug. 1877, No. 665 W. 31st Aug. 1877, No. 6650 W.
Bridges for the Vayitri-Gúdalúr road.—Telegram to the Director-General of Stores to ship the — to Madras, if too late for Calicut.	23rd Mar. No. 849 W.	...	6th June 1889, No. 1492 W. 16th July 1890, No. 1919 W. 16th July 1890, Nos. 1920-21 W. 15th Nov. 1890, No. 4684 C. 24th Nov. 1890, No. 4856 C. 2nd Feb. 1891, No. 310 W.
Temporary establishment.—The — required for the Kálahasti Sub-division, sanctioned.	23rd Mar. No. 855 W.	...	......
Copper tape required in the Public Works Stores, Madras.—Ordered that the indent for the — be forwarded to the Home Government.	24th Mar. No. 864 W.	...	......
Indent forwarded to the Home Government.	24th Mar. No. 865 W.	...	......
Copy of the above forwarded to the Government of India.	24th Mar. No. 866 W.	...	......

1 Subjects.	2 Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
Establishment required for the Tank Restoration Scheme.— Sanctioning the special — in 1891-92.	1891. 24th Mar. No. 867 W.	...	28th Feb. 1890, No. 641 W. 21st Jan. 1891, No. 188 W. 21st Feb. 1891, No. 985 C. 10th Mar. 1891, No. 1311 C.
Goods shed at Tuticorin, Tinnevelly district.— Estimate of Rs. 8,000 for constructing a corrugated iron — at Tuticorin, Tinnevelly district, sanctioned.	24th Mar. No. 868 W.	...	......
Public buildings in the Kistna district.—Intimating that the question of providing funds for the construction of certain — will be considered on the estimate being sanctioned.	25th Mar. No. 881 W.	...	9th June 1890, No. 1593 W. 30th Oct. 1890, No. 4436 C. 9th Dec. 1890, No. 3281 W. 7th Jan. 1891, No. 1461 W. 14th Mar. 1891, No. 747 W. 18th Mar. 1891, No. 1545 C.
Completion reports.—Passing orders on the quarterly report submitted by the Examiner, Public Works Accounts of —, overdue on the 28th February 1891.	24th Mar. No. 882 W.	...	......
Old Taluk Cutcherry at Badvel.—The — transferred to the Local Fund Board, with remarks.	25th Mar. No. 883 W.	...	......
European Prison Buildings, Ootacamund.—Passing orders on the utilisation of — on their relinquishment by the Jail department.	28th Mar. No. 888 W.	...	21st Mar. 1891, No. 1637 C. 29th Jan. 1891, No. 510 C. 5th June 1891, No. 17 W. 10th Dec. 1890, No. 5138 C. 26th Nov. 1890, No. 4900 C. 16th Dec. 1890, No. 3350 W. 9th April 1888, No. 1068 W. 10th May 1890, No. 1316 W. 17th May 1888, No. 1450 W. 17th Feb. 1888, No. 565 W. 9th Feb. 1888, No. 583 C.

PUBLIC WORKS DEPARTMENT,

BUILDINGS AND ROADS BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT,

FOR THE MONTH OF MARCH 1891.

Buildings and Roads.
Civil Works.

READ—the following papers :—

G.O., dated 31st January 1890, No. 156, Judicial.

Letter from the Inspector-General of Jails, dated 6th February 1890, No. 52.

Demi-official from the above officer, dated 10th March 1890.

Endorsement in the Judicial Department, dated Fort St. George, 29th March 1890.

The foregoing papers will be referred to the Public Works Department for favor of issue of necessary orders for a special report being submitted to Government in this department, with estimate, as to whether the pump can be worked at one side of the well, either in the manner indicated by the Inspector-General or by means of a beam pivoted on the edge of the well, with perhaps guides or a parallel bar motion at the end of the beam.

(Signed) A. G. CARDEW,
Under-Secretary.

From G. D. WYBROW, Esq., Superintending Engineer, I Circle, to the Chief Engineer, Public Works Department, dated Dowlaishweram, 12th December 1890, No. 1808 G.D.

With reference to para. 4 of your memo. No. 1776 C., dated the 9th April 1890, regarding certain improvements to the building of the Central Jail at Rajahmundry, I have the honor to inform you that an estimate has been framed, amounting to Rs. 2,680, which allows for the several improvements, recommended by the Inspector-General of Jails.

2. The chief points by the Inspector-General of Jails are as follows :—

Para. III of the Inspector-General's letter—The ridge ventilators project too little over the roof, allowing the rain to beat in.—It would be costly to remove the whole of the roof ventilators and it is proposed to add a projection of zinc sheeting, so as to afford additional protection against the rain beating.

Increased ventilation of wards.—This is allowed for as recommended by the Inspector-General of Jails by opening out large barred windows, with shutters, at the ends of all the wards and barred ventilators in the gable ends of the wards as well as in the partition walls of the several wards. For the better ventilation of the buildings with terraced roofs, cowls are provided of 8″ diameter, similar in pattern but larger to those already fixed in other parts of the jail.

3. *Para. IV of the Inspector-General of Jails.*—The estimate now framed includes removing the parapet wall erected for the protection of the police sentries and erecting in its place an iron railing, 3 feet in height. The removal of the filling in between the rafters and top of walls of the hospital is allowed for in the estimate. The filling in is only composed of broken brick in chunam and can easily be removed.

4. *Para. V—Well.*—The proposals regarding the pump over the well have already been sanctioned in G.O., No. 2085 W., dated 31st July 1890.

5. The Superintendent of the Jail informs me that, in carrying out the enclosed estimate, no convict labor will be available.

6. The enclosures of your memorandum under reply are herewith returned.

G.O., dated 17th February 1891, R. No. 190, Judicial.

Read—endorsement of the Public Works Department, dated 8th January 1891, No. 81 C., forwarding letter from the Superintending Engineer, I Circle, dated 12th December 1890, No. 1808 G.D., submitting an estimate for the improvements to Central Jail, Rajahmundry, recommended by the Inspector-General of Jails and reporting on the several points noticed by him.

Read—also endorsement of the Inspector-General of Jails, dated 2nd February 1891, No. 44.

Order—dated 17th February 1891, R. No. 190, Judicial.

Approved and returned to the Public Works Department.

(True Extract.)

(Signed) A. BUTTERWORTH,
Acting Under-Secretary.

ORDER—dated 2nd March 1891, No. 568 W., Public Works.

The estimate, amounting to Rs. 2,680, for improvements to the Central Jail at Rajahmundry in the Godávari district, is sanctioned.

2. This sanction has been registered as Provincial No. 102 W. of 1890-91 and classified as Civil Buildings, Original Works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle, with seven enclosures.
„ Examiner, Public Works Accounts.
„ Judicial Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 2nd.

Recd. *Encl.*

G.O., 2nd Mar. 1891, No. 568 W.

MARCH.

Central Jail at Rajahmundry
Godavari District

Estimate of Rs. 2,680 for improvements to the —, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following :—

Reports from the Examiner, Public Works Accounts, bringing to notice that the following sub-divisions had not been inspected for more than six months, dated 20th February 1891, Nos. 1088, 1089, 1090, 1091, 1092, 1093, 1094 :—

Sub-divisions.	*Divisions.*
Vriddháchalam	South Arcot.
Chidambaram	South Arcot.
Western	Kistna Western.
Aska	Rushikulya.
Russellkonda reservoir works	Rushikulya.
Western	Godávari Western.
Tank and embankment	Godávari Western.

ORDER—dated 2nd March 1891, No. 569 W., Public Works.

Communicated to the Superintending Engineers concerned for inquiry and report.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineers, I, II and V Circles.
" Examiner, Public Works Accounts.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 2nd.

Recd. *Encl.*

G.O., 2nd Mar. 1891, No. 569 W.

MARCH.

Sub-divisions

Reports from the Examiner, Public Works Accounts, bringing to notice that certain— had not been inspected for more than six months, communicated to Superintending Engineers concerned for inquiry and report.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

G.O., dated 30th January 1891, No. 40, Marine.

Read—the following paper :—

From Captain H. B. SIMPSON, H.M.'s I.M., Acting Presidency Port officer, to the Chief Secretary to Government, dated Madras, 17th January 1891, No. 500/12 G.

With reference to G.O., Marine, No. 18, dated 14th January 1891, I have the honor to acquaint you, for the information of Government, that, on the 10th instant, I received from Messrs. Adamson, Mactaggart and Co. of Negapatam a telegram, similar to the one addressed by them to Government. I, thereupon, directed the Port officer, Negapatam, to adopt at once such measures as will tend to keep the boat passage open and to furnish an estimate of the cost of the work in due course. On the 13th instant the Port officer telegraphed to me, for sanction, to expend Rs. 500 for erecting groynes, in order to prevent the erosion of the sea and thus removing the difficulty to boat traffic. In view of the fact that the Tanjore district has no Port funds to its credit, I telegraphed, in reply, on the 14th instant, to say that the amount may be spent from landing and shipping fees if the committee approved of it. On the 16th instant, the Port officer informed me by telegram that the committee declined to sanction money from landing and shipping fees for port conservancy purposes. I am this day in receipt of a report from the Port officer, in which he points out the urgent necessity for erecting the proposed groynes, and, under the circumstances, have been compelled to telegraph to him to meet the expenditure of Rs. 500 from the fees in question, pending the sanction of Government thereto, which I now ask, and beg also that my action in the matter may be approved.

2. The report called for in para. 2 of G.O., Marine, No. 5, of 8th January 1891, will shortly be submitted.

Order— dated 30th January 1891, No. 40, Marine.

The Public Works Department will report on what professional advice the groynes are being constructed. If none has been taken, the work should be stopped at once until the Public Works Department has been consulted. Orders will issue in the Public Works Department for an immediate attention to the matter.

2. The Government considers that the cost of groynes constructed for the improvement of the port of Negapatam may properly be debited to the landing and shipping dues.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

No. 614 C, dated 4th February 1891.

Referred to the Superintending Engineer, V Circle, for report.

From Major D. McN. CAMPBELL, R.E., Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, dated 23rd February 1891, No. 85 W.

In returning your endorsement No. 614 C., dated 4th February 1891, I have the honor to forward a copy of a report from the Executive Engineer, Negapatam division, No. 376, of 11th instant. You will see that that officer considers that the groynes now being erected are very necessary, but they are for the prevention of erosion on a spit of land and do not serve the purpose of keeping a passage open for boats.

2. The Executive Engineer makes a proposal for keeping the passage to sea open, regarding which I am unable to give an opinion without inspection; but I will be at Negapatam shortly and will then be able to give my views on the subject.

ENCLOSURE.

From C. E. NORFOR, Esq., Executive Engineer, Negapatam division, to the Superintending Engineer, V Circle, dated 11th February 1891, No. 376.

With reference to your endorsement No. 57 N.G., dated 4th instant, on No. 614 C. of 4th idem, from the Secretary to Government, Public Works Department, I have the honor to inform you that the groynes being put up by the Port officer at Negapatam are to prevent encroachment of the sea on to the spit which is now being eroded. The groynes do not at all serve the purpose of keeping a passage open to sea for boat traffic as supposed by the Presidency Port officer.

I consider the groynes now being put up very necessary and those put up last year with the same object have been a success.

The only thing I think to keep the channel open for boat traffic is to erect a stone groyne out to sea. We might begin with a small one, say, 300 feet long. The Port officer says that the money at the disposal of the Landing and Shipping Dues committee now amounts to Rs. 10,000, which should more than suffice for the stone groyne. This groyne would probably prevent further erosion south and would thus obviate the necessity of erecting palmyra ones next year.

ORDER—dated 3rd March 1891, No. 586 W., Public Works.

It would appear that the groynes under construction by the Marine Department prevent the encroachment of the sea and are necessary. There is thus no objection to the work being carried out.

2. The proposals of the Executive Engineer for keeping the sea passage open will no doubt be reported on by the committee appointed in G.O. (Marine Department), No. 74, of 25th February 1891.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Marine Department.
„ Superintending Engineer, V Circle.
To Colonel J. Pennycuick, R.E., President, Negapatam Harbour Committee.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 3rd.

Recd. *Encl.*

G.O., 3rd Mar. 1891, No. 586 W.

MARCH.

Groynes

Passing orders regarding the construction of — at the port of Negapatam.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

Proceedings of the Local and Municipal Department, dated 24th February 1891, Mis. No. 407 L.

ABSTRACT.—Forwarding a statement showing the length of road communication maintained by Local Boards in the Madras Presidency during the years 1888-89 and 1889-90.

STATEMENT showing the length of road communication maintained by public authorities in Madras during the year 1888-89.

[This statement does not include roads and streets within municipal limits.]

Name of division.	Name of district.	Length of metalled roads maintained by the Public Works Department.	Length of unmetalled roads maintained by the Public Works Department.	Length of metalled roads maintained by Local authorities.	Length of unmetalled roads maintained by Local authorities.	Total of metalled roads.	Total of unmetalled roads.
		MILES.	MILES.	MILES.	MILES.	MILES.	MILES.
Ganjam and Rushikulya divisions.	Ganjam ..	49⅛	87⅝	691	24	740⅛	111⅝
Vizagapatam	Vizagapatam ..	22	30	290	447	312	477
Godávari, Eastern, Central and Western.	Godávari ..	..	..	710	170	710	170
Kistna, Eastern and Western ..	Kistna ..	..	26½	438	454	438	480½
Nellore	Nellore ..	⅖	..	873	118	873⅖	118
Bellary .. .. }	Anantapur ..	..	..	155	530	155	530
	Bellary ..	33	..	38	581	71	581
Cuddapah	Cuddapah ..	..	..	322	878	322	878
Kurnool	Kurnool ..	..	..	452	138	452	138
Nílgiri	Nílgiri ..	97	39	25	418	122	457
Coimbatore .. .. {	Salem ..	..	..	554	1,255	554	1,255
	Coimbatore .	..	..	980	557	980	557
West Coast .. .. {	South Canara ..	..	..	148	925	148	925
	Malabar ..	..	..	465	894	465	894
North Arcot	North Arcot ..	..	..	1,403	..	1,403	..
Chingleput	Chingleput ..	20⅝	..	606	127	626⅝	127
South Arcot	South Arcot ..	..	47	687	427	687	474
Tanjore and Negapatam ..	Tanjore ..	..	169½	159	1,278	159	1,447½
Trichinopoly	Trichinopoly ..	..	20	505	118	505	138
Madura	Madura ..	10	..	554	581	564	581
Tinnevelly	Tinnevelly ..	..	..	804	96	804	96
Architect	Madras town ..	4$\frac{3}{10}$	..	..	..	4$\frac{3}{10}$	..
	Total ..	236$\frac{9}{20}$	419⅝	10,859	10,016	11,095$\frac{9}{20}$	10,435⅝

Statement showing the length of road communication maintained by public authorities in Madras during the year 1889-90.

[This statement does not include roads and streets within municipal limits.]

Name of division.	Name of district.	Length of metalled roads maintained by the Public Works Department.	Length of unmetalled roads maintained by the Public Works Department.	Length of metalled roads maintained by Local authorities.	Length of unmetalled roads maintained by Local authorities.	Total of metalled roads.	Total of unmetalled roads.
		MILES.	MILES.	MILES.	MILES.	MILES.	MILES.
Ganjam and Rushikulya divisions.	Ganjam ..	$82\frac{1}{4}$	$30\frac{3}{4}$	693	34	$775\frac{1}{4}$	$64\frac{3}{4}$
Vizagapatam	Vizagapatam ..	22	30	293	465	315	495
Godávari, Eastern, Central and Western.	Godávari ..	..	..	684	195	684	195
Kistna, Eastern and Western ..	Kistna ..	..	$26\frac{1}{2}$	465	427	465	$453\frac{1}{2}$
Nellore	Nellore ..	$\frac{2}{5}$	..	892	113	$892\frac{2}{5}$	113
Bellary	Anantapur ..	..	..	162	523	162	523
	Bellary ..	33	..	33	541	66	541
Cuddapah	Cuddapah ..	..	..	322	878	322	878
Kurnool	Kurnool ..	..	..	462	155	462	155
Nílgiri	Nílgiri ..	97	79	25	448	122	527
Coimbatore	Salem ..	..	..	554	1,288	554	1,288
	Coimbatore ..	..	..	975	535	975	535
West Coast	South Canara ..	..	..	148	846	148	846
	Malabar ..	..	..	470	867	470	867
North Arcot	North Arcot ..	..	..	1,398	..	1,398	..
Chingleput	Chingleput ..	$20\frac{5}{8}$	..	606	82	$626\frac{5}{8}$	82
South Arcot	South Arcot ..	..	47	687	427	687	474
Tanjore and Negapatam ..	Tanjore ..	..	$140\frac{7}{8}$	160	1,282	160	$1,422\frac{7}{8}$
Trichinopoly	Trichinopoly ..	..	20	509	117	509	137
Madura and Periyár Project ..	Madura ..	10	$9\frac{3}{4}$	569	684	579	$693\frac{3}{4}$
Tinnevelly	Tinnevelly ..	..	..	816	128	816	128
Architect	Madras town ..	$4\frac{3}{10}$	..	..	..	$4\frac{3}{10}$	..
	Total ..	$269\frac{23}{40}$	$383\frac{7}{8}$	10,923	10,035	$11,192\frac{23}{40}$	$10,418\frac{7}{8}$

ORDER—dated 3rd March 1891, No. 600 W., Public Works.

Ordered that the statement of road communication maintained by public authorities in the Madras Presidency for the years 1888-89 and 1889-90 be printed and copies furnished to the Government of India. The statement has been compiled from information supplied by Superintending Engineers as regards roads in charge of the Public Works Department, and, in respect to those under Local Boards, the Presidents of the Boards have furnished the requisite particulars through the Local and Municipal Department.

2. For future years the arrangements ordered in G.O., No. 2502 W., dated 18th September 1890, will be adopted.

(Here enter No. 601 W., dated 3rd March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
To the Consulting Architect to Government.
„ Local and Municipal Department.

ENDORSEMENT—dated 3rd March 1891, No. 601 W., Public Works.

Copy of the above forwarded to the Government of India with reference to the correspondence quoted below :—

From the Government of India, No.	128 C.,	dated	13th May	1890.
" " " "	217 C.,	"	18th July	"
" " " "	280 C.,	"	26th Aug.	"
" " " "	288 C.,	"	4th Sept.	"
" " " "	407 C.,	"	22nd Nov.	"
" " " "	61 C.,	"	11th Feb.	1891.

(By Order.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 3rd.

Recd. *Encl.*

G.O., 3rd March 1891, Nos. 600, 601 W.

MARCH.

Statement of Road Communication

Forwarding — maintained by public authorities in the Madras Presidency for 1888-89 and 1889-90.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following paper :—

G.O., dated 19th February 1891, No. 130, Revenue.

Read—the following Proceedings of the Board of Revenue (Land Revenue), dated 11th December 1890, Mis. No. 7882 :—

Read—the following letter from E. S. LAFFAN, Esq., Acting Collector of Bellary, dated 25th November 1890, No. 2485-Ref. :—

With reference to Board's Proceedings, Mis. No. 6663, dated 18th ultimo, I have the honor to forward copies of two letters received by me from the Executive Engineer in reply to my inquiry as to whether the construction of a house for the Head Assistant Collector of Hospet could be commenced at once.

2. It will be observed that even what the Executive Engineer describes as "really necessary repairs" are estimated to cost more than Rs. 6,500, the maximum allowed in the Public Works Department, and that in the second letter absolutely necessary repairs are limited to the construction of a new roof. As the small side rooms or bath rooms of the building are in their present state absolutely useless and the stables a mere heap of crumbling ruins, I am of opinion that this falls very short of what is absolutely necessary. The only substantial parts of the building are, as will be gathered from the professional certificate forwarded with my letter, dated 30th August, Reference on Mis. Register No. 3818/1799, the four thick and clumsy walls of the original dargah together with the partition wall, which divides it into two narrow and oppressively gloomy rooms. These, with the thatched verandah in front, are practically the whole extent of the accommodation provided. I submit that money spent upon the repair and alteration of such a building would be money thrown away and that a comfortable and cheerful house could be built for much less than would be required to make the dargah a really suitable dwelling. As already reported I consider it in its present state altogether unsuitable as a residence for a European officer and I do not believe that anything that can be done to it, short of pulling it down, can ever do away with its inherent defects. From Mr. Larminie's second letter I gather that he is of the same opinion. I would strongly recommend, therefore, that the present scheme be abandoned and that orders be issued in the Public Works Department for the immediate preparation of plans and estimates for a new building.

Resolution—dated 11th December 1890, Mis. No. 7882.

Submitted for the consideration of Government.

2. The plan and estimate sanctioned in G.O., dated 27th May 1890, No. 3199, provides only for improving and extending the Head Assistant's bungalow at Hospet and the word "construction" used in para. 2 of G.O., dated 9th October 1890, No. 788, appears to be a clerical error.

3. The Collector now repeats his request that a new house should be built on the ground that it would be hardly more expensive and very much more satisfactory. It is evident from the various descriptions of the "dargah," which have already been given, that this is the case, and the Board accordingly submits his letter for favorable consideration.

Read—again G.O., dated 19th January 1891, Mis. No. 406, referring to the Board of Revenue, for remarks, endorsement of the Public Works Department, dated 8th January 1891, No. 82 C., referring, for favor of opinion, letter from the Superintending Engineer, III Circle, forwarding an estimate for the alterations and improvements to the Head Assistant Collector's residence at Hospet, Bellary district, with the suggestion that his office should be converted into a dwelling house and the dargah into an office.

Read—also the following Proceedings of the Board of Revenue (Land Revenue), dated 7th February 1891, Mis. No. 837 :—

Read—the following papers :—

Endorsement of the Revenue Department, dated 19th January 1891, No. 406.

Board's reference thereon, dated 22nd January 1891.

"Forwarded to the Collector of Bellary for early report."

Letter from R. SEWELL, Esq., Collector of Bellary, dated 31st January 1891, Reference on Mis. Register No. 585/385.

In reply to your reference on Government Register No. 121 of 1891, dated 22nd January 1891, forwarding, for report, the suggestion of Superintending Engineer contained in his No. 2886, dated 27th December 1890, addressed to the Chief Engineer, Public Works Department, Madras, I have the honor to state that I have inspected the bungalow and building in company with Mr. Campbell, Head Assistant Collector, who lived in the old building about 3 years. Mr. Campbell would prefer that the old building should be converted into Head Assistant Collector's residence as originally proposed. So far as I am concerned the proposal to convert the dargah into an office and the present office building into residence seems most to commend itself. The only objection anticipated by the Superintending Engineer that the house would be too near the public road is not of very great importance in my opinion, as there is not much traffic on this particular road. It is not one of the great high roads, but is a road leading to Rámandrúg and Sandúr from Hospet.

In para. 4 of the Superintending Engineer's letter, the cost of additions, &c., to the office required to make it a dwelling is put down roughly at Rs. 4,000, and, though he says nothing about the cost of converting the dargah into office, I imagine it will not cost a great deal. Probably the whole can be done for Rs. 10,000, which is the estimated cost of providing a new dwelling as recommended by Board to Government in its Proceedings, Mis. No. 7882, dated 11th December 1890, on letter of Mr. Laffan, No. 2485, dated 25th November 1890.

Resolution—dated 7th February 1891, Mis. No. 837.

Submitted to Government in reply to Government endorsement, dated 19th January 1891, No. 406.

2. The matter is mainly one of comparative cost, but the suggestion of the Superintending Engineer appears to the Board to be a good one and the necessary plans and estimates might be ordered to be prepared.

3. The dargah is evidently unfitted for a residence, but, as the Superintending Engineer suggests, it might possibly be worked up into an office with good architectural effect and the existing walls would then be utilized instead of wasted.

4. The present office appears to need very little to fit it for a residence and the design appears suitable, though it would be an improvement if the bath rooms were double in case a married Head Assistant is sent there.

Order—dated 19th February 1891, No. 130, Revenue.

The proposal to convert the Head Assistant Collector's office at Hospet into a residence and to utilize the dargah as an office does not commend itself to Government. The cost of conversion of both buildings would probably not fall far short of the cost of constructing a new house for the Head Assistant Collector, whilst the result might be that neither building would be suitable. It seems preferable therefore to erect a new building on the site of the dargah or near to it, utilizing the materials thereof as far as possible..

2. Orders will issue in the Public Works Department for the preparation of the necessary plans and estimates at an early date.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

ORDER—dated 3rd March 1891, No. 602 W., Public Works.

Communicated to the Superintending Engineer, III Circle, who will submit estimates for a new building for a Head Assistant Collector's residence, as soon as possible, after receipt of the type design now under preparation by the Consulting Architect, who will be requested to expedite completion.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

the Superintending Engineer, III Circle,
with plans and estimates (returned).
Consulting Architect to Government.
Revenue Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 3rd.

Recd. *Encl.*

G.O., 3rd Mar. 1891, No. 602 W.

MARCH.

Head Assistant Collector's Residence in Hospet

Proceedings, Revenue Department, directing to prepare plans and estimates for constructing a new building for a —, communicated to the Superintending Engineer, III Circle, with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From H. W. FOSTER, Esq., Registrar of the High Court of Judicature, Appellate Side, to the Chief Secretary to Government, dated Madras, 28th January 1891, No. 271.

With reference to G.O., dated 8th December 1890, No. 1942, Judicial, requesting the High Court to explain the necessity for erecting a witness shed in the compound of the District Munsif's Court-house at Tirukoilúr, I am directed to forward a copy of the letter from the District Judge of South Arcot, dated 19th instant, No. 5, and to state that the circumstances stated by the District Judge, viz., the absence of trees or other available shelter for witnesses in the neighbourhood of the new court-house, appear to the High Court to sufficiently indicate the necessity for the construction of a shelter shed for witnesses.

The plan and estimate, amounting to Rs. 1,125, are approved and transferred to the Public Works Department.

(By Order.)

(Signed) A. BUTTERWORTH,
Ag. Under-Secretary.

17th February 1891.

ORDER—dated 3rd March 1891, No. 603 W., Public Works.

The estimate, amounting to Rs. 1,125, for constructing a shed for witnesses in the compound of the District Munsif's Court at Tirukoilúr, in the South Arcot district, is sanctioned as supplemental to the estimate of Rs. 13,925 sanctioned in G.O., No. 2660 W., dated 10th October 1890.

2. This sanction has been registered as Provincial No. 103 W., of 1890-91, and classified as Civil Buildings, Original Works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, V Circle, with four enclosures.
" Examiner, Public Works Accounts.
" Judicial Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 3rd.

Recd. *Encl.*

G.O., 3rd Mar. 1891, No. 603 W.

MARCH.

Shed

Estimate of Rs. 1,125 for constructing a — for witnesses in the compound of the District Munsif's Court at Tirukoilúr, South Arcot district, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following papers :—

From Lieut.-Colonel R. R. E. DRAKE-BROCKMAN, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 6th February 1891, No. 64 W.

I have the honor to bring to your notice that the second draftsman's place in the West Coast division has not been filled up since the permanent incumbent Gopala Reddy's transfer to the Periyár Project in March last, as the pay of the appointment, Rs. 20 to 30, is not sufficiently attractive to induce competent men to accept the post in the West Coast, an out of way and costly placê to live in for men from the East Coast.

2. Notifications inviting applicants for the vacancy in the District and Fort St. George Gazettes were of no avail.

3. In these circumstances, I beg to recommend that you will be pleased to obtain the sanction of Government to the entertainment of a second-class draftsman on Rs. 35 to 50 instead of as at present a third-class man on Rs. 20 to 30.

4. I may add that the want of a second draftsman is very much felt in the West Coast Division office.

ENCLOSURE.

IV CIRCLE.

STATEMENT of Proposition for revision of establishment.

Order of Government sanctioning the present establishment.		Office to which the proposition refers.	Nature of change.												Proposition.						Remarks by Local Government.
			Present scale.						Proposed scale.						Permanent.		Temporary.				
					Pay.						Pay.				Increase per month.	Decrease per month.	Increase per month.		Decrease per month.		
No.	Date.		Number.	Designation.	Minimum.	Increment.	Maximum.	Average or fixed.	Number.	Designation.	Minimum.	Increment.	Maximum.	Average or fixed.	Amount.	Amount.	Period.	Amount.	Period.	Amount.	
					RS.	RS.	RS.	RS.			RS.	RS.	RS.	RS.	RS.	RS.		RS.		RS.	
Budget for 1890-91—G.O., No. 1058 W.	28th April 1884.	West Coast division.	1	Clerk, III class, 2nd grade.	60	4	80	75	1	Clerk, III class, 2nd grade.	60	4	80	75	..	..	..	..	..	..	
			1	Do. IV do. 1st do.	40	2	50	47½	1	Do. IV do. 1st do.	40	2	50	47½	..	..	..	..	..	..	
			1	Do. IV do. 2nd do.	30	2	40	37½	1	Do. IV do. 2nd do.	30	2	40	37½	..	..	..	..	..	..	
			2	Clerks, IV class, 3rd grade.	20 × 2	2 × 2	30 × 2	55	2	Clerks, IV class, 3rd grade.	20 × 2	2 × 2	30 × 2	55	..	..	..	..	..	..	
			1	Draftsman, 1st class ..	50	4	70	65	1	Draftsman, 1st class ..	50	4	70	65	..	..	..	..	..	..	
			1	Do. 3rd do. ..	20	2	30	27½	1	Do. 2nd do. ..	35	3	50	46¼	18¾	..	..	..	..	..	
			1	Messenger	7	..	..	7	1	Messenger	7	..	..	7	..	..	..	..	..	..	
			1	Do.	6	..	..	6	1	Do.	6	..	..	6	..	..	..	..	..	..	
				Total ..	..	..	..	320½		Total ..	..	..	..	339¼	18¾	..	..	..	..	..	

COIMBATORE,
6th February 1891.

(Signed) R. R. E. DRAKE-BROCKMAN, Lt.-Col., R.E.,
Superintending Engineer, IV Circle.

Office-note from the Examiner of Public Works Accounts, dated 24th February 1891, No. 1164.

The entries in column "present scale" of the proposal statement do not represent the sanctioned scale of office establishment for the West Coast division. The financial value of each appointment, so far as entered in the proposal statement, has not been calculated in accordance with article 164 of the Civil Service Regulations. The necessary corrections have been made by my office. The proposal statement as now corrected shows the existing scale of office establishment and the scale proposed by the Superintending Engineer, IV Circle.

ORDER—dated 3rd March 1891, No. 604 W., Public Works.

In the circumstances explained by the Superintending Engineer, IV Circle, sanction is accorded to the entertainment, in the West Coast division, of a second-class draftsman on Rs. 35 to 50 instead of the usual third-class draftsman on Rs. 20 to 30.

2. The attention of the Superintending Engineer is drawn to the remarks of the Examiner in his office-note above recorded.

3. The sanction accorded in para. 1 of these Proceedings has been registered as Provincial No. 89 W. of 1890-91, and classified as establishment, permanent.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle.
" Examiner, Public Works Accounts.

GENERAL.
ESTABLISHMENT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 3rd.

Recd. *Encl.*

G.O.; 3rd Mar. 1891, No. 604 W.

MARCH.

Draftsman

The entertainment of a second-class — in the West Coast division, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers :—

From Major D. McN. CAMPBELL, R.E., Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department (through the Examiner of Public Works Accounts), dated Chepâk, 10th February 1891, No. 64 W.

I have the honor to forward an indent on the Director-General of Stores in England for a steam fire-engine for Chepâk required by the Consulting Architect to Government.

ENCLOSURE.

REPORT to accompany indent for a steam fire-engine for the protection of the Chepâk offices against fire.

This indent has been prepared with reference to G.O., No. 169 W., dated 19th January 1891. The engine cannot be locally manufactured or obtained from surplus stores available from other departments.

(Signed) H. IRWIN,
Consulting Architect to Government.

Office note from the Examiner of Public Works Accounts, dated Madras, 23rd February 1891, No. 1149/153.

The accompanying letter from the Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, No. 64 W., dated 10th February 1891, with an indent (No. 15 of 5th February 1891) for English stores, for transmission to the Secretary of State, is forwarded for necessary action.

2. I certify that funds to meet the estimated outlay in England in connection with this indent during the year 1891-92 will be provided by the Local Government to the extent of £834-7-0 in the estimate of the Public Works Department for that year.

ORDER—dated 3rd March 1891, No. 605 W., Public Works.

Ordered that the indent be forwarded to the Home Government for compliance.

(Here enter No. 606 W., dated 3rd March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, V Circle.
„ Consulting Architect to Government.
„ Examiner, Public Works Accounts.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 3rd.

Recd. *Encl.*

G.O., 3rd Mar. 1891, No. 605 W.

MARCH.

Steam fire-engine

Ordered that the indent for a — required for the protection of the public offices at Chepâk be forwarded to the Home Government.

PUBLIC WORKS DEPARTMENT.

General.
Account.

LETTER—from

COLONEL J. PENNYCUICK, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

THE DIRECTOR-GENERAL OF STORES,
INDIA OFFICE,
LONDON.

SIR,

I am directed to forward, for favor of compliance, an indent in duplicate for a steam fire-engine required for the protection of public offices at Chepâk, Madras.

2. The certificate of the Examiner of Public Works Accounts is embodied in the Proceedings of Government * forwarded herewith.

* No. 605 W., dated 3rd March 1891.

(Here enter No. 607 W., dated 3rd March 1891.)

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
3rd March 1891.

ENDORSEMENT—dated 3rd March 1891, No. 607 W., Public Works.

Copy of the above, with copy of the indent, forwarded to the Government of India for information.

(By Order.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 3rd.

Recd. *Encl.*

3rd Mar. 1891, Nos. 606, 607 W.

MARCH.

Steam fire-engine

Forwarding copy of indent for a — required for the protection of the public offices in Chepâk, Madras.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

Proceedings of the Board of Revenue (Land Revenue), dated 20th January 1891, Mis. No. 463.

MR. W. A. HAPPELL.

Read—the following letter from W. DUMERGUE, Esq., Acting Collector of Malabar, to the Secretary to the Commissioners of Land Revenue, dated Calicut, 1st December 1890, Reference on C. No. 5437-P.

I have the honor to address the Board on the subject of the Special Assistant Collector's bungalow at Málápuram.

G.O., 21st April 1879, No. 1187 W.
" 22nd September 1879, No. 2414 W.
" 7th January 1887, No. 23 W.

2. It will be seen from the marginally-noted Government orders that there stood on the site, on which the present building is situated, the remains of a house built by Colonel Levie, an officer attached to the Police Corps, stationed at Málápuram some years ago, and that, owing to want of a house for the Special Assistant Collector to live in, the Government sanctioned a sum of Rs. 3,433 for putting on a new roof and otherwise fitting it for a residence for the Special Assistant Collector. The work was completed in 1880-81 at a cost of Rs. 3,188-7-4 and the building was taken charge of by the Revenue Department on the 5th September 1880. The rent of the building was Rs. 14 per mensem up to 31st July 1882 and from 1st August 1882 it was raised to Rs. 27. The rate was revised by G.O., dated 7th January 1887, No. 23 W., Public Works, and fixed at Rs. 20 at 7½ per cent. on the outlay and this sum continues to be paid.

3. It was proposed by Mr. Logan to replace the thatched roof by a tiled one, and, as the Public Works Department was of opinion that the walls of the building were not strong enough to bear a tiled roof, that department was asked to prepare an estimate for making the necessary improvements.

4. The plan and estimate prepared in accordance with the above requisition were received in this office on the 26th April 1888 with the Superintending Engineer's letter No. 139-M of the 23rd idem (copy of which is enclosed). Mr. Winterbotham thereupon wrote to the Superintending Engineer on the 12th May expressing his opinion that the Special Assistant Collector would not appreciate a rise of Rs. 32 per mensem in his rent in return for being provided with a tiled roof instead of a thatched one and proposing at the same time to let the matter lie over for the time being.

On the 6th September last, the Executive Engineer revived the question and inquired whether I wished to have the proposed improvement carried out. The papers were forwarded to Mr. Batten, Acting Special Assistant Collector, for report, a copy of which is herewith submitted. The Executive Engineer was then addressed with a view to his revising the estimate if he deemed it necessary with reference to present circumstances. He informs me in his letter, dated 19th ultimo, that no revision is necessary.

5. Concurring with the Special Assistant Collector as to the necessity for a tiled roof, I beg to forward the plan and estimate for submission to Government for sanction and provision of funds.

6. There is great force in the remarks of the Special Assistant Collector regarding the rent and I beg that they may receive due weight in fixing the rent when the proposed improvement is completed.

Resolution—dated 20th January 1891, Mis. No. 463.

The plan and estimate for providing a tiled in place of the existing thatched roof for the residence of the Special Assistant Collector of Malabar will be submitted for the approval and sanction of Government.

2. The Collector raises the question whether the cost of the alteration ought to be added to the capital cost for the purpose of calculating rent. The Board considers that *quâ* alteration it ought not, but that it would be fair to revalue the house as altered and charge rent on the value as thus arrived at: the result would, however, probably be a rent not much short of that now proposed by the Superintending Engineer, for it is evident that the additions now to be made will add greatly to the value of the building, which has hitherto been held on a rent, calculated only on the cost of restoring the original bungalow: the expense of dismantling is petty.

(A true Copy and Extract.)

(Signed) H. A. SIM,
Acting Secretary.

No. 1199, Revenue.

The plan and estimates submitted with the Proceedings read above are approved and transferred to the Public Works Department.

FORT ST. GEORGE,
20th February 1891.

(Signed) C. A. GALTON,
Secretary to Government.

Note by the Chief Engineer, Public Works Department.

The rent of Rs. 20 per mensem fixed in G.O., No. 23 W., dated 7th January 1887, for the Special Assistant Collector's bungalow at Málápuram was calculated at $7\frac{1}{2}$ per cent. on the cost (Rs. 3,188) of the improvements effected in 1880-81, the value of the original building having been disregarded. The $7\frac{1}{2}$ per cent. rate has, however, been superseded by the rules in para. 1041, Public Works Code, and, if the work provided for in the estimate now submitted be carried out, the rent must be calculated on a capital sum arrived at as follow:—

	RS.
Cost of improvements in 1880-81	3,188
Do. of present improvements	5,070
Ten per cent. on Rs. 5,070 for establishment and tools and plant ...	507
Total ...	8,765

To this must be added the value of the site, which will be fixed in accordance with G.Os., Nos. 3389 W., dated 19th December 1890, and 242 W., dated 26th January 1891. If the total capital cost be taken approximately at Rs. 8,815, the rent to be paid will be about Rs. 52 per mensem and no reduction can be conceded without the sanction of the Government of India. As, however, a considerable portion of the existing building will be removed in carrying out the improvements now proposed, it

is suggested that, on completion of the work, the building be revalued and that application be made to the Government of India for permission to fix the rent on the basis of such revaluation.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Chief Engineer, P.W.D.

ORDER—dated 5th March 1891, No. 622 W., Public Works.

The estimate, amounting to Rs. 5,070, for improvements to the Special Assistant Collector's quarters at Málápuram, is sanctioned.

2. The Superintending Engineer, IV Circle, will apply for funds for the work early in 1891-92, and, on its completion, a revaluation of the building and site should be submitted in accordance with the suggestion in the Revenue Board's Proceedings and the Chief Engineer's note above recorded.

3. This sanction has been registered as Provincial No. 105 W. of 1890-91 and classified as Civil Buildings, Original Works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle, with five enclosures.
,, Examiner, Public Works Accounts.
,, Revenue Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras

PUBLIC WORKS.

Dated March, 5th.

Recd. *Encl.*

G.O.; 5th Mar. 1891, No. 622 W.

MARCH.

Special Assistant Collector's Quarters at Malapuram

Estimate of Rs. 5,070 for improvements to the —, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From H. IRWIN, Esq., C.I.E., Consulting Architect to Government, to the Chief Engineer, Public Works Department, dated Madras, 7th January 1891, No. 2949.

With reference to G.O., No. 3066 W., dated 17th November 1890, I have the honor to forward a plan and an estimate, amounting to Rs. 13,440, for constructing a new Cricket Pavilion at Chepâk; this is after greatly reducing the accommodation at first proposed.

2. I regret that the estimate cannot be cut down to Rs. 10,000 unless by reducing the size of the building very much more, but possibly a reduction of 10 feet in length of the main room verandah and bar would still leave a sufficiently commodious building. This would bring the cost to about Rs. 12,000; the design would be the same, but the spacing between the verandah pillars would be reduced to 12′ $11\frac{2}{5}$″ instead of 14′ $11\frac{2}{5}$″.

From H. C. KING, Esq., Honorary Secretary, Madras Cricket Club Pavilion Fund, to the Chief Engineer, Public Works Department, dated The Cloisters, 4th February 1891.

With reference to your memorandum No. 177 C., dated 15th ultimo, I have the honor to inform you that at a general meeting of the Madras Cricket Club held yesterday, it was resolved to accept the design and estimate submitted by the Consulting Architect to Government and forwarded to me with the above noted memorandum.

2. I have the honor to return the report and specification forwarded to me with the above noted memorandum, and to inform you that the plans which accompanied the latter will be returned in the course of a day or two.

From H. C. KING, Esq., Honorary Secretary, Madras Cricket Club Pavilion Fund, to the Chief Engineer, Public Works Department, dated The Cloisters, 14th February 1891.

In further reply to your memorandum No. 177, dated 15th ultimo, I have now the honor to return the plans forwarded therewith.

Note by the Chief Engineer, Public Works Department.

The plan is approved.

2. The amount of the estimate exceeds by Rs. 3,300 the sum of Rs. 10,000 mentioned in Mr. King's letter printed with G.O., No. 3066 W., dated 17th November 1890, but it is understood that the Club is prepared to raise the additional amount.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Chief Engineer, P.W.D.

ORDER—dated 6th March 1891, No. 636 W., Public Works.

The estimate, amounting to Rs. 13,440, for the construction of a new Cricket Pavilion at Chepâk, Madras, is sanctioned, and a sum of Rs. 2,000 is appropriated for the work, from the Provincial reserve with the Government, in accordance with para. 2 of G.O., No. 3066-W., dated 17th November 1890.

2. The Consulting Architect to Government will proceed with the work.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Consulting Architect to Government, with five enclosures.
„ Examiner, Public Works Accounts.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 6th.

Recd. *Encl.*

G.O., 6th Mar. 1891, No. 636 W.

MARCH.

Cricket Pavilion at Chepak, Madras

Estimate of Rs. 13,440 for the construction of a new —, sanctioned, and Rs. 2,000 appropriated for the work.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following paper:—

From C. A. STUART, Esq., Officiating Postmaster-General, Madras, to the Secretary to Government, Public Works Department, dated Vizagapatam, 21st February 1891, No. C. 1310/5932.

I have the honor to state that great difficulty is experienced in getting a suitable building at Kuthevakam for the combined Post and Telegraph office opened there on the 15th December 1890 at the desire of the Government of Madras. The Superintendent of Post Offices, Presidency division, addressed the Executive Engineer, Buckingham Canal, regarding a building which was formerly in use by his department but now vacant, and was informed by that officer that the old police station-house is no longer required by him and that it can be transferred under sanction of Government to the Executive Engineer, Chingleput, for being occupied by this department.

2. As it will be a great advantage to this as well as to the Telegraph Department if the combined office can be accommodated in the building in question, I beg to request that you will be so good as to obtain the necessary sanction for the transfer of the same to this department.

Order—dated 6th March 1891, No. 637 W., Public Works.

The transfer to the Postal Department of this building, said to be no longer required by Public Works officers, is sanctioned, subject to local enquiry as laid down in para. 980 of the Public Works Code.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, V Circle.
" Examiner, Public Works Accounts.
" Judicial Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 6th

Recd. *Encl.*

G.O., 6th Mar. 1891, No. 637 W.

MARCH.

Old Police Station at Ennore

The transfer to the Postal Department of the —, sanctioned with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

Read—the following paper:—

From Brigadier-General E. H. EYRE, Quarter master-General, to the Secretary to Government, Military Department, dated Ootacamund, 14th February 1891, No. 294 M. W.

With reference to G.O., No. 2199, of 25th March 1890, I am desired by the Commander-in-Chief to forward, for sanction and transfer to the Public Works Department for disposal, plans and estimate, &c., the latter amounting to Rs. 3,990 for reconstructing the quarters of the Sergeant Instructor of the Wynaad Company of the Malabar Volunteer Rifles at Vayitri and for providing an armoury, &c.

2. The plans and estimates which have been approved by His Excellency have been duly countersigned.

No. 1022, Military.

Approved and transferred to the Public Works Department for disposal.

Fort St. George,
17th February 1891.

(Signed) A. KENNEY-HERBERT, Brigdr.-Genl.,
Secretary to Government.

Order—dated 6th March 1891, No. 638 W., Public Works.

The estimate, amounting to Rs. 3,990, for reconstructing the quarters of the Sergeant Instructor of the Wynaad Company of the Malabar Volunteer Rifles at Vayitri, is sanctioned.

2. This sanction has been registered as Imperial No. 8 W. of 1890-91, and classified as Military Original Works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle, with 10 enclosures.
" Examiner, Public Works Accounts.
" Military Department.

BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 6th.

Recd. *Incl.*

G.O., 6th Mar. 1891, No. 638 W.

MARCH.

Quarters

Estimate of Rs. 3,990 for reconstructing the — of the Sergeant Instructor of the Wynaad Company of the Malabar Volunteer Rifles at Vayitri, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From C. VINCENT, Esq., Under-Secretary to the Government of India, Public Works Department (Civil Works—Buildings), to the Secretary to the Government of Madras, Public Works Department, dated Calcutta, 21st February 1891, No. 70 B.

I am directed to acknowledge the receipt of your letter No. 321 W., dated the 4th February 1891, and, with reference thereto, to inquire if there are many cases outstanding in which the rents have to be recalculated as required by rule V of Public Works Department Resolution No. 479 B., dated the 7th September 1888, and, if there are, to request that their settlement may be expedited.

2. I am to add that the Government of India is pleased to accord sanction to the proposal made in your letter under reply that, in all cases in which alteration in the rates of rents of buildings occupied as residences is involved by the application of the existing rules, the revised rates shall have effect from the date on which notice of the same is served on the occupant. This sanction is accorded on the understanding that no further delay will take place in carrying out the orders of Government in regard to the recalculation of rents.

ORDER—dated 6th March 1891, No. 648 W., Public Works.

Communicated to officers of the Public Works Department for information and guidance with reference to para. 2.

2. The revision of rents ordered in G.O., No. 3389 W., dated 19th December 1890, should be completed with the least possible delay, and no time should be lost in giving notice to occupants in cases in which alteration in the rates of rent is involved by the application of the existing rules. Where notices of changes in the rates have already been served, the difference will be adjusted in accordance with the ruling of the Government of India above recorded.

3. The following letter will be addressed to the Government of India.

(Here enter No. 649 W., dated 6th March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
To the Consulting Architect to Government.
„ Superintendent of Works, Periyár Project.
„ Examiner, Public Works Accounts, with reference to his office-note No. 498, dated 23rd January 1891.
„ Revenue Department.
„ Public, &c., Departments.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 6th.

Recd. *Encl.*

G.O., 6th Mar. 1891, No. 648 W.

MARCH.

Rents

Letter from the Government of India, sanctioning the proposal that in all cases in which alteration in the rates of — is involved by the application of the existing rules, the revised rates shall have effect from the date on which notice of the same is served on the occupant, communicated to officers of the Public Works Department.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

LETTER—from

COLONEL J. PENNYCUICK, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

SIR,

I am directed to acknowledge the receipt of your letter No. 70 B., dated 21st February 1891, and, in reply to para. 1, to invite a reference to the Examiner's review of the capital and revenue accounts of Government buildings forwarded with my endorsement No. 2418 W., dated 8th September 1890, which specifies the cases in which the rates of rent should be revised under the existing rules. Most of those cases have, it is believed, been disposed of, but appeals are still occasionally received by the Government against the recovery of arrears of rent from 1st April 1889 under the operation of rule V of Government of India Resolution No. 479 B., dated 7th September 1888.

2. A further revision of the rates of rent has been necessitated by the issue of Government of India Standing Order No. 235, modifying para. 28, chapter XI, vol. I, Public Works Code, and I am directed to forward a copy of the Proceedings of this Government No. 3389 W., dated 19th December 1890, showing the steps taken to expedite disposal of the matter. Superintending Engineers have now again been directed to see that no delay takes place in carrying out the orders of Government on this subject.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
6th March 1891.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

. PUBLIC WORKS.

Dated March, 6th.

Recd. *Encl.*

6th Mar. 1891, No. 649 W.

MARCH.

Rents

Regarding cases in which the rates of — should be revised under the existing rules, &c.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following paper :—

From G. D. WYBROW, Esq., Superintending Engineer, I Circle, to the Chief Engineer, Public Works Department, dated Dogam, 1st February 1891, No. 2166 G. D.

I have the honor to submit herewith a letter (to be returned), No. 679 S., dated the 8th January 1891, and its enclosure received from the Executive Engineer, Godávari Eastern division, and to request that you will be so good as to obtain the sanction of Government for the transfer of two rooms of building No. 1 in the old District Jail, Rajahmundry, to the Salt and Abkári Department for public use. The plan showing the buildings in the District Jail was forwarded to you with this office No. 2874 G. D., dated the 23rd March 1888. The plan (to be returned) of building No. 1 is herewith submitted.

Order—dated 7th March 1891, No. 660 W., Public Works.

The transfer of the two rooms in question to the Salt and Abkári Department is sanctioned.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle.
„ Revenue Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 7th.

Recd. *Encl.*

G.O., 7th Mar. 1891, No. 660 W.

MARCH.

Old District Jail at Rajahmundry

The transfer of two rooms of building No. 1 in the — to the Salt and Abkári Department, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following paper :—

From Captain R. T. LAWLEY, Military Secretary to the Right Honorable the Governor, to the Secretary to Government, Public Works Department, dated Guindy Park, 21st February 1891, No. 1126.

I have the honor to forward, herewith, a plan and an estimate for Rs. 3,134 for constructing a coach-house and stables for the Marine Villa, and request that you will be so good as to obtain the sanction of Government for the same.

From the Consulting Architect to Government, dated 2nd March 1891, No. 3631.

Order—dated 9th March 1891, No. 665 W., Public Works.

The estimate, amounting to Rs. 3,134, for constructing a coach-house and stables for the Marine Villa, Madras, is sanctioned on the understanding that the cost can be met from the normal allotment for Government Houses.

2. The Consulting Architect to Government will report what amount can be spent on the work during the current official year.

3. This sanction has been registered as Provincial No. 106 W. of 1890-91 and classified as Civil Buildings, Original Works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Consulting Architect to Government, with four enclosures.
" Examiner, Public Works Accounts.
" Military Secretary to His Excellency the Governor.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 9th.

Recd. *Encl.*

G.O., 9th Mar. 1891, No. 665 W.

MARCH.

Coach-house and Stables

Estimate, amounting to Rs. 3,134, for constructing a — for the Marine Villa, Madras, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

Telegram from the Superintending Engineer, I Circle, dated 4th February 1891.

Office-note from the Examiner, Public Works Accounts, dated 12th February 1891, No. 893.

From G. D. WYBROW, Esq., Superintending Engineer, I Circle, to the Chief Engineer, Public Works Department, dated Dowlaishweram, 19th February 1891, No. 1213 G.N.

With reference to G.O., No. 114 W., dated the 14th January 1891, and your telegram of the 10th instant, relative to the construction of a new District Munsif's court at Aska, I have the honor to state that the District Judge of Ganjam reported to the High Court of Madras that the Aska court-house is small and low with inadequate accommodation and recommended the construction of a new building (*vide* his letter printed with G.O., No. 137 W., dated the 16th January 1884).

2. An estimate, amounting to Rs. 11,400, for the construction of a new court-house, forwarded through the District Judge, Ganjam, was sanctioned in G.O., No. 2388 W., dated the 29th August 1889. Out of an allotment given, an expenditure of Rs. 277 was made in 1889-90.

3. A revised estimate for Rs. 12,730 was submitted by my predecessor on the 5th September 1890 to the District Judge for the sanction of Government. The revision of the estimate is due to two reasons:—

(1) Change of site from the site of the present District Munsif's court to a site occupied by the Post office. The change of site necessitated deeper foundations.

(2) Increase in the thickness of the main walls suggested by the Chief Engineer (*vide* his note printed in the G.O., No. 2388 W. of 29th August 1889).

4. The original estimate provided for demolishing the existing court-house and constructing the new building on the site of the old one. As, however, the old court-house, although not suitable for its present purpose, was found to be in fair order and suitable for the location of the Post office and Sub-Registrar's office, a change of site was recommended by the Executive Engineer. The new site selected was the site of the Post office. This site has the approval of the District Judge.

5. The Post office since demolished was a very inferior building with mud walls and in a very bad state of repair.

The Postmaster-General, Madras, gave his permission to the demolition of the old Post office.

6. Regarding the arrangements to locate the Post office and Sub-Registrar's office in the old court-house, the approval of the heads of those departments was obtained.

7. An estimate, amounting to Rs. 2,070, was sanctioned by the Superintending Engineer in August 1889 for the construction of a Sub-Registrar's office. The construction of this building is now rendered unnecessary by the proposal to locate the Sub-Registrar's office in the old court-house.

8. I inspected the present District Munsif's court-house at Aska on the 1st instant and can confirm the report made by the late Mr. Daniel in his letter, printed

with G.O., No. 137 W. of 16th January 1884, that the present building is unsuitable for its present purpose and that it is incapable of any material improvement. The present building appears to have been a dwelling house converted to its present purpose.

9. With regard to the idea that the District Munsif wished for the removal of the court-house, on the plea of discomfort caused by a neighbouring cartstand, I would respectfully beg to state that the inconvenience of having a cartstand close by was brought forward not as a plea for a new building, but for a change of site of the new building from the present site of the old building to another more suitable site. The site of the Post office was eventually selected as more suitable, besides having the advantage of retaining the old court-house for the location of the Postal and Registration Departments.

10. In conclusion, I would add that a large quantity of material has been collected for the new court-house, and an expenditure of Rs. 3,515 incurred including the expenditure in 1889-90. The excavations for the foundations of the new building on the site of the old Post office are nearly completed.

11. Under the above circumstances, I trust that Government will be pleased to sanction the revised estimate and to order that the work may be proceeded with.

ORDER—dated 9th March 1891, No. 669 W., Public Works.

It is observed that the proceedings of the local officers in changing the site of the building without sanction was irregular, but it is too late now to stay proceedings, and the work may accordingly be continued on the revised estimate, which should be re-submitted for formal sanction. The Superintending Engineer will report the sum required for expenditure during the current official year.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle.
" Examiner, Public Works Accounts.
" Judicial Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 9th.

Recd. *Encl.*

G.O., 9th Mar. 1891, No. 669 W.

MARCH.

District Munsif's Court at Aska, Ganjam District

Passing orders regarding the construction of the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT

Buildings and Roads.
Civil Works.

READ—the following paper :—

From G. D. WYBROW, Esq., Superintending Engineer, I Circle, to the Chief Engineer, Public Works Department, dated Dowlaishweram, 17th February 1891, No. 499 V.Z.

I have the honor to submit, herewith, a revised estimate, together with a comparative statement, amounting to Rs. 5,150, for constructing Mahaliaputty bridge, 20-feet span, on the Potinghi-Koraput road in the Vizagapatam division, and to recommend that the sanction of Government may be obtained to the same.

2. The original estimate of Rs. 4,175 was sanctioned in G.O., No. 3162 W., dated 7th November 1889, and the cause of excess (Rs. 975) over this estimate is due to the raising of abutments and wings, which was necessitated by the bridge being built at a point in the river selected by Mr. Grant, where the banks are higher than at the site originally selected.

ORDER—dated 9th March 1891, No. 675 W., Public Works.

The revised estimate, amounting to Rs. 5,150, for constructing the Mahaliaputty bridge on the Potinghi-Koraput road in the Vizagapatam division, is sanctioned in supersession of the estimate of Rs. 4,175 included in the general estimate sanctioned in G.O., No. 3162 W., dated 7th November 1889. The total estimate for the road will now stand at Rs. 2,80,205.

2. This sanction has been registered as Provincial No. 107 W. of 1890-91 and classified as Communications, Original Works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle, with three enclosures.
„ Examiner, Public Works Accounts.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

· PUBLIC WORKS.

Dated March, 9th.

Recd. *Encl.*

G.O., 9th Mar. 1891, No. 675 W.

MARCH.

Mahaliaputty Bridge, Vizagapatam Division

Revised estimate of Rs. 5,150 for constructing the — on the Potinghi-Koraput road, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following paper :—

Office-note from the Examiner, Public Works Accounts, dated Madras, 19th February 1891, No. 1048.

With reference to Military Department notification No. 61, published at page 80, part I, of the *Fort St. George Gazette*, dated 3rd February 1891, granting extension of leave for six months on medical certificate, please obtain orders of Government as to whether —

(1) the six months' extension of leave on medical certificate now granted is in supersession of the three months' special leave sanctioned by the Government of India and published in part I, page 972, notification No. 775, of the *Fort St. George Gazette* of 25th November 1890, and counts from 1st March 1891, the date on which the fifteen months' furlough granted to Colonel Vibart from 29th November 1889 will expire, or whether

(2) the six months' leave on medical certificate now sanctioned is in addition to the three months' special leave granted by the Government of India and counts from 1st June 1891, the date on which the three months' special leave would expire.

2. It seems probable that, when the Secretary of State granted the extension on medical certificate, he was not aware of the grant of three months' special leave.

ORDER—dated 10th March 1891, No. 682 W., Public Works.

Ordered that the Secretary of State be addressed.

(Here enter No. $\frac{6}{682}$ W., dated 10th March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Examiner, Public Works Accounts.

GENERAL.
ESTABLISHMENT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 10th.

Encl.

Recd.

G.O., 10th Mar. 1891, No. 682 W.

MARCH.

Colonel H. M. Vibart, R.E.

Ordered that the Secretary of State for India be addressed regarding the six months' extension of leave on medical certificate granted to —.

PUBLIC WORKS DEPARTMENT.

LETTER—to

THE RIGHT HONORABLE THE SECRETARY OF STATE FOR INDIA.

MY LORD,

With reference to the letter from our Secretary in the Public Works Department, No. 3392 W., dated 19th December 1890, addressed to the Under-Secretary of State for India, we have the honor to inquire whether (1) the six months' leave on medical certificate recently granted by Your Lordship to Colonel H. M. Vibart, R.E., is in extension of the fifteen months' furlough previously granted to him and counts from the 1st March 1891, or (2) whether it is in extension of three months' special leave sanctioned by us under the authority of the Government of India, and so counts from the 1st June 1891.

2. If the reply to the first question is in the affirmative, the grant of three months' special leave will be cancelled.

We have the honor to be,

My Lord,

Your Lordship's most obedient, humble servants,

(Signed) WENLOCK.

(„) J. C. DORMER, Lieut.-Genl.

(„) H. E. STOKES.

(„) J. H. GARSTIN.

(True Copy.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
10th March 1891.

GOVT. OF MADRAS.

PUBLIC WORKS DEPARTMENT.

(Copy.)

LETTER to the Right Honorable the Secretary of State for India.

No. $\frac{6}{682\ W.}$, dated 10th Mar. 1891.

Requesting to be furnished with certain information in respect of the six months' leave on medical certificate granted to Colonel, H. M. Vibart, R.E.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From Lieut.-Colonel A. C. SMITH, R.E., Superintending Engineer, VI Circle, to the Chief Engineer, Public Works Department, dated Trichinopoly, 26th January 1891, No. 994 T.N.

I have the honor to report that I inspected the following light-houses, viz. :—

Hare Island, Tuticorin, on 15th instant.
Manapad, on 19th instant.

2. I could get no steamer to Pámban, so had to give up going there and also I have proposed that the inspection of the Muttum light be undertaken by the Travancore authorities as it is situated some 15 miles or more to west at Cape Comorin and well within that state.

This proposal has not been approved in your No. 359 C., dated 22nd January 1891, since received.

3. The light-house at Hare Island is in good order and the strengthening bands recently put up by this department (*vide* G.O., No. 2009 W., dated 23rd July 1890) seem calculated to render the lantern quite secure.

4. With reference to the Manapad light all the structure, such as it is, is in good order ; but the arrangements are, to say the least of it, bordering on the inhuman and it surprises me that such a state of things should have obtained so long.

5. Some months ago we were requested to provide some sort of a roof or protection to the *lantern* and accordingly an estimate was sanctioned for a weather-boarding roof, but, as this only protects the lantern from rain when unaccompanied by wind, I do not think it is of much use, and, moreover, weather boarding is not stout enough for such an exposed position.

6. The lantern stands on the top of a square tower situated on a rocky promontory near Manapad in a very exposed situation. The top of the tower about 8 or 9 feet square consists of a flat terrace surrounded by *open* balustrading, and, prior to the construction of the weather boarding, had no roof whatever.

7. On the top of this tower and exposed to all wind (which is very prevalent here) and rain in the monsoon the lascars are supposed to watch turn and turn about for a spell of 3 hours each; they are not only unprovided with tarpaulin coats and sou'westers, but have not even thick clothing of any sort and in bad weather the roof is of no practical use in keeping rain off either the men or the lantern.

8. There seems to be an order to the effect that the lamp shall be changed or trimmed every three hours, though it would burn well for 6 at least, and how this is effected without taking it down into the office below on a tempestuous night is more than I can say.

9. Captain Baker asked me to see if I thought the stanchions supporting the roof were strong enough to bear canvass blinds all round, to be pulled down when the trimming process was going on, but I should say this would be objectionable as lascars are quite capable of keeping such a snug protection up longer than is necessary and thus obscuring the light.

10. Two alternatives suggest themselves to me—first to build up solid walls perforated by one small window on two sides to landward (the lantern only illumines 180° to seaward) and glaze the other two sides completely with plate glass in frames,

or, second, to build a larger octagonal or hexagonal lantern of iron frame and plate glass and thin iron ventilated roof of sufficient size to permit the attendant to walk round the lantern inside it; the floor is quite strong enough to support such a structure.

11. I have requested the Executive Engineer to at once fill up the perforations in the balustrading with light brick work which will then afford some protection to a man squatting under the parapet during his three hours' watch, and these parapets might easily be raised one foot without detriment to the light.

12. In any case the present weather boarding should be renewed with corrugated iron and this roof would be serviceable in either alternative proposed in para. 10.

13. Something undoubtedly should be done to protect the men, for even were they provided with water proofs they must be half perished as there is no room to walk about as on a ship's bridge and if a sort of sentry box were provided this would not protect the lamp in any way; at present drift rain has constantly to be wiped off the lantern glasses.

ENCLOSURE.

DETAILS of light-houses inspected by Lieut.-Colonel A. C. SMITH, R.E., Superintending Engineer, VI Circle, in January 1891.

Light-house.	Class of light.	Height of centre of lantern above mean sea-level	Distance at which light is visible.	Object of light.	Remarks.
		FEET.	MILES.		
Tuticorin ..	Fourth order catadioptric fixed white.	85	12½	To mark position of anchorage.	The light-house at Hare Island, Tuticorin, is in good order and the strengthening bands recently put up by this department seem calculated to render the lantern quite secure.
Manapad ..	Sixth order dioptric.	225½	19	Not known specially.	All the structure, such as it is, is in good order, but the arrangements are, to say the least of it, bordering on the inhuman (*vide* separate report accompanying this).

No. 625 C.

Referred to the Marine Department for favor of remarks.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Government, P.W.D.

5th February 1891.

G.O., dated 3rd March 1891, No. 80, Marine.

Read—the following papers:—

Endorsement of the Public Works Department, dated 5th February 1891, No. 625 C., on letter from the Superintending Engineer, VI Circle, dated 26th January 1891, No. 994 T.N.

From the Presidency Port officer, dated 20th February 1891, No. 393/59 G.

With respect to reference, dated 9th February 1891, on Marine current No. 136 (report of Superintending Engineer, VI Circle, in connection with the light-houses at Muttum, Manapad, Tuticorin and Pámban), I have the honor to remark as follows:—

Para. 2 *of report.*—The Port officer, Tuticorin, under instructions from this office, visits the Muttum light-house once in three months and finds no great difficulty in doing so.

Some improvements to Pámban light-house, including those suggested by Mr. Douglass on his recent inspection, are awaiting the arrival of the Superintending or Executive Engineer and it is hoped that one of these two officers will be able to visit the place at an early date.

Para. 3 *of report.*—I have visited Hare Island light-house recently and observed that the guard railing round the gallery is dangerously light in construction.

Para. 5 *of report*—The inhumanity of the arrangements at Manapad is not apparent, there being several other lights similarly arranged and I am not aware that any complaint has ever been made. It is perfectly true that difficulty and inconvenience is experienced in changing the lamps, &c., on account of the wind and it is to be regretted that a lantern was not constructed at first when the light-house was built. The Superintending Engineer suggests building an iron octagonal lantern, but Mr. Douglass, in para. 11 of his report, mentions, among other improvements, cylindrical glazing and gunmetal and steel helical framing, which, I think, should be adopted and made capable of being kept open as the lamp, it must be remembered, is constructed for burning in the open air.

Para. 7 *of report.*—It would be a very small matter to supply oil-skin suits for the men who require to be exposed to the weather at light-houses and this might be done.

Order—dated 3rd March 1891, No. 80, Marine.

The Presidency Port officer's letter will be communicated to the Public Works Department with the request that early arrangements may be made for inspecting the Pámban light-house and for the provision of a suitable guard railing at the Hare Island light-house.

2. No radical change in connection with the Manapad light should be carried out until the matter has been reported on by Captain Street, who will be requested to give the matter his early consideration.

3. The Government is decidedly of opinion that some shelter from inclement weather should be provided for the keepers or watchers at all light-houses and that it would not be sufficient to supply the men with oil-skin suits. The Presidency Port officer will report on the point and the Public Works Department will be requested to carry out such alteration as may be considered necessary without delay.

(True Extract,)

(Signed) N. S. BRODIE,
Acting Assistant Secretary.

ORDER—dated 10th March 1891, No. 688 W., Public Works.

Communicated to the Superintending Engineer, VI Circle, for information and guidance.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, VI Circle.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 10th.

Recd. *Encl.*

G.O., 10th Mar. 1891, No. 688 W.

MARCH.

Light-houses

Proceedings, Marine Department, passing orders on letter from the Presidency Port officer making certain remarks on the inspection report of the Superintending Engineer, VI Circle, on certain —, communicated to the Superintending Engineer for information and guidance.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From A. T. ARUNDEL, Esq., Collector of Kistna, to the Superintending Engineer, II Circle, dated Masulipatam, 20th February 1891, No. 1478.

In reply to your No. 2894, dated 16th February 1891, I have the honor to inform you that I have requested the Board of Revenue, through the Conservator of Forests, Northern Circle, to obtain the sanction of Government for the transfer of the Karempudi building to the Forest Department and shall be glad if you will move Government to the same effect in your department.

No. 3020 K.S.

Communicated to the Chief Engineer, Public Works Department, with reference to para. 2 of G.O., No. 104 W., of 10th January 1891, with a request that the old building at Karempudi may be transferred to the Forest Department as proposed by the Collector.

2. The building in question has already been vacated by the Judicial Department on the 26th December last.

BEZVADA,
3rd March 1891.

(Signed) J. HANNAN,
Superintending Engineer, II Circle.

ORDER—dated 12th March 1891, No. 707 W., Public Works.

The transfer of the building to the Forest Department is sanctioned, para. 2 of G.O., No. 104 W., dated 10th January 1891, being cancelled.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Judicial Department.
,, Revenue ,,
,, Superintending Engineer, II Circle.
,, Examiner, Public Works Accounts.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 12th.

Recd. *Encl.*

G.O., 12th Mar. 1891, No. 707 W.

MARCH.

District Munsif's Court-house at Karempudi, Kistna district.

The transfer of the — to the Forest Department, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

From W. P. AUSTIN, Esq., C.S., Chairman, Harbour Trust Board, to the Chief Secretary to Government, dated Madras, 14th February 1891, No. 1690.

I have the honor to submit, herewith, for the information and orders of His Excellency the Right Honorable the Governor in Council, an amended estimate for the completion of the Madras Harbour, with an eastern entrance, in accordance with the sanctioned design, as modified after the inspection lately made by Sir Alexander Rendel.

2. In 1884, the late Mr. Parkes framed an estimate of Rs. 45,90,051 for the restoration and completion of the harbour with an eastern entrance. The estimate was sanctioned in G.O., No. 2251 W. of 8th September 1886, and has formed the authority for the advances made from time to time to the Harbour Trust Board for the harbour works.

3. From the comparative statement of work done up to 15th October 1890, it will be seen that the above sanction has been nearly exhausted and that further funds are necessary to complete the harbour. It must now be explained why more money is required and how much, and reference is invited to the accompanying estimate of Rs. 56,73,434 and comparative statement showing the saving and loss upon each item of Mr. Parkes' estimate, the quantities in each case being actuals up to the date given in the statement.

4. Early in 1887 doubts were expressed regarding Mr. Parkes' design and from April in that year until February 1889 the works could only be carried on very slowly, as the details of the design were under discussion in England and in India.

5. This serious delay has by itself very largely increased the cost of the works, but there are additional reasons for the insufficiency of Mr. Parkes' estimate—

(*a*) The rise in the price of cement delivered on the works and the increased quantity in each block.

(*b*) The cost of the protective works to the north of the harbour.

The excess due to (*a*) is estimated at Rs. 3,18,337 and to (*b*) Rs. 59,949. With regard to (*a*) it may be observed that, although Mr. Parkes increased the proportion of cement in his blocks, after preparing his estimate in 1884, Sir Alexander Rendel, when he inspected the works in February 1890, expressed an opinion that a further increase in the proportion of cement was necessary in the south pier head. The cost of protective works was omitted by Mr. Parkes, because he considered that the value of the land formed by the accretion to the south should be taken as a set-off against the cost of any work required to protect the foreshore on the north; but this view has never been definitely accepted by Government, and, for the purposes of the present estimate, it is necessary to include the cost of such work up to date; probably a yearly charge will have to be incurred for the upkeep of these works, but this question is one that may be left until the harbour has been completed and the construction accounts closed.

The increased expenditure due to the delay above mentioned is estimated at Rs. 1,44,761 and represents the value of skilled labor and supervision which had to be retained on the works, but could not be fully utilized while the works were stopped so far as the superstructure was concerned.

6. In addition to these items, the extra work ordered by Sir Alexander Rendel for the pier heads and the new machinery required have increased the cost of the harbour as estimated in 1884.

7. In August 1888 Mr. Pogson prepared five plans and estimates for completing the harbour, and, among these, was an approximate estimate of Rs. 49,72,596, which provided for completing the harbour on the lines sanctioned by the Secretary of State by telegram in December 1888 and by despatch, No. 2 (Public Works) of 24th January 1889, printed with G.O., No. 622 W. of 2nd March 1889. This estimate being based on better information as regards rates than was available in 1884 may with advantage be taken as a basis for comparison with the present estimate of Rs. 56,73,434.

8. The difference between these estimates amounts to Rs. 7,00,838, but 6 lakhs of this is due to the extra work and machinery ordered by Sir Alexander Rendel, the rise in price of cement and the stoppage of the works after August 1888. In order to make this clear a statement is attached, giving the details of the above sum of 6 lakhs.

9. Briefly it may be said that the approximate estimate of August 1888 after allowing for causes of excess, which could not have been foreseen, is insufficient by Rs. 96,944, or not quite 2 per cent.

10. It is believed that the estimate of Rs. 56,73,434 provides fully for the completion of the harbour in accordance with the instructions of the Secretary of State, and, although the difference between this amount and Mr. Parkes' estimate of 1884 is the large sum of 10·83 lakhs, the Trustees are unanimously of opinion that the reasons given for the excesses are satisfactory and that there has been no delay at any time which might have been avoided by the executive staff; but, on the contrary, most satisfactory progress has been made whenever such was possible.

11. The Trustees, therefore, request that a further advance of Rs. 15,00,000 (fifteen lakhs of rupees) may be sanctioned. This includes Rs. 1,55,462 for the extension of the revetment north of the harbour, regarding which a separate estimate is being submitted, and Rs. 2,33,460, estimated proceeds of the sale of plant and machinery, which, however, cannot be disposed of till after the completion of the works.

ENCLOSURES.

	RS.
Present estimate	56,73,434
Estimate of August 1888	49,72,596
Difference ...	7,00,838
Extra work ordered by Sir Alexander Rendel (*vide* item 50 of explanations in comparative statement)	2,60,000
Extra protective works, &c. (*vide* item 49 of explanations in comparative statement)	64,920
Extra machinery (*vide* item 48 of explanations in comparative statement)	1,60,097
Due to rise in price of cement since August 1888 (*vide* item 8 of explanations in comparative statement)	58,512
Abutment question. An abutment was ordered by the Secretary of State in view of the possibility of a change of entrance, which would necessitate a break in the wall. Special blocks requiring special moulds were made and wave-breaker blocks were set in orderly rows and afterwards taken up again (*vide* item 10 of comparative statement)	8,665
Stoppage of works pending settlement of N.E. question since August 1888 (*vide* item 10 of comparative statement) ...	51,700
	6,03,894
Difference ...	96,944

MADRAS,
29th January 1891.

A. LEE POGSON.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras at a meeting held at the offices of the Sea Customs on Friday, the 5th day of December 1890.

* * * * * *

19. Examined statement by the Board's Engineer, dated 21st November 1890, submitting details of expenditure upon the Madras Harbour Works to 15th October and estimate for completing the eastern entrance to the harbour as approved by Sir Alexander Rendel.

Resolved that this estimate be submitted to Government with a report as to the necessity of the additional expenditure.

* * * * * *

EXTRACT of Proceedings of the Trustees of the Harbour of Madras at a meeting held at the offices of the Sea Customs on Friday, the 9th day of January 1891.

* * * * * *

2. The Board's Engineer was in attendance and submitted a tabulated statement of details in connection with the revised estimate for the completion of the eastern entrance to the harbour and explained generally the causes of the additional outlay needed.

Resolved that this statement be printed and annexed to the revised estimate and that, on receipt of further explanatory details necessitated by the particulars now laid before the Board, the revised estimate be submitted to Government with the report called for in the Board's resolution No. 19, dated 5th December 1890.

* * * * * *

EXTRACT of Proceedings of the Trustees of the Harbour of Madras at a meeting held at the offices of the Sea Customs on Friday, the 23rd day of January 1891.

* * * * * *

12. The Trustees then resumed the consideration of the amended estimate for the completion of the eastern entrance to the harbour on the sanctioned design with modifications approved by Sir Alexander Rendel. Mr. Lee Pogson was in attendance and submitted a tabulated statement showing the savings and extra expenditure upon Mr. Parkes' original estimate up to 15th October 1890 and gave explanations of, and reasons for, the additional outlay under various sub-heads.

Resolved that the information given by the Board's Engineer be tabulated and printed with the three statements now before the Board and that the estimates as then completed be circulated and reconsidered at the next meeting, or at a special meeting if practicable to hold one sooner.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras at a meeting held at the offices of the Sea Customs on Friday, the 13th day of February 1891.

* * * * * *

14. The amended estimate for the completion of the harbour, as finally revised, having been printed and circulated to each Trustee together with a forecast of the financial position of the Trust prepared by the Board's Secretary showing the position under various contingencies, was then discussed at length, Mr. Lee Pogson being in attendance and giving the Trustees further information as to the details of the estimate.

Read letter from the Board's Engineer, No. 1335, dated 9th February 1891, submitting an estimate for the extension of the revetment at Cassimode amounting to Rs. 1,55,462 for the protection of the foreshore.

Read minute by Major W. L. C. Baddeley, R.E., and draft letter to Government submitting, for the information and orders of His Excellency the Right Honorable the Governor in Council, the amended estimate for the completion of the harbour with an eastern entrance in accordance with the sanctioned design as modified after the inspection lately made by Sir Alexander Rendel.

Resolved that this estimate and draft letter for the completion of the harbour be approved and that Government be requested to make a further advance of Rs. 15,00,000 to complete the eastern entrance and for the extension of the revetment to protect the foreshore to the north.

Resolved, further, that the estimate for the extension of the revetment be approved and that Government be urgently addressed requesting immediate permission to make arrangements for the necessary preliminary outlay to the extent of about Rs. 18,000 (eighteen thousand)

in anticipation of the sanction of His Excellency the Right Honorable the Governor in Council under section 64, Act II of 1886, to the total outlay of Rs. 1,55,462 required for the protection of the coast line north of the harbour.

(True Extracts.)

(Signed) C. PINSENT,
Secretary, Harbour Trust Board.

Transferred to the Public Works Department and a copy furnished to the Financial Department for information with reference to para. 11.

(Signed) J. F. PRICE,
Chief Secretary.

27th February 1891.

ORDER—dated 13th March 1891, No. 718 W., Public Works.

With the letter recorded above, the Chairman, Harbour Trust Board, submits an amended estimate for the completion of the Madras Harbour. In February 1890 the works were inspected by Sir Alexander Rendel, Consulting Engineer to the Secretary of State, who then recommended to the Trustees certain modifications of the sanctioned design with the view to give greater stability to the works and proposed that the eastern entrance should be made 500 feet wide instead of 450 feet, to which it was intended to reduce it from the 550 feet originally allowed by Mr. Parkes. The modifications were accepted by the Trustees and approved by Government and the amended estimate now submitted includes the cost of these works.

The original estimate for the harbour amounted to Rs. 57,45,165 against which the recorded outlay was Rs. 65,54,490.

	RS.
After the disaster of November 1881 a revised estimate became necessary for the restoration and completion of the works and this amounted to	45,90,051
The expenditure against this estimate up to 15th October 1890 has been	42,67,899
Leaving an unexpended balance of	3,22,152
The new works now proposed are estimated to cost	10,83,382
Making a total of	14,05,535

for which details are given on page 2 of the statement submitted by the Harbour Trust Board.

The amended estimate, for which sanction is now asked, amounts to Rs. 56,73,434 and is made up as follows:—

	RS.
Revised estimate sanctioned in 1886 (G.O., No. 2251 W., dated 8th September 1886)	45,90,051
New work now proposed	10,83,385
Total ...	56,73,434
The expenditure to 15th October 1890 has been	42,67,899
Leaving an unexpended balance of	14,05,535
To this must be added a sum of	1,55,462
For protecting the foreshore north of the harbour, for which a separate estimate has been submitted, making a total of ...	15,60,997

The amount, for which advances remain to be made for completion of the works, will thus stand at Rs. 15,00,000 in round numbers. In addition to this, the Board calculate on realizing ultimately a sum of Rs. 2,33,460 by the sale of plant and machinery, and, as this receipt is shown as a deduction on page 2 of the statement,

from which the above figures are taken, the sale-proceeds must be left at the disposal of the Board and will go towards meeting the charges under the amended estimate.

The excesses, as compared with the sanctioned revised estimate, are fully explained in the Chairman's letter and in the statement which accompanies it. His Excellency the Governor in Council accepts the amended estimate, as now presented, and resolves to recommend it for the formal sanction of the Right Honorable the Secretary of State for India.

(Here enter No. 719 W., dated 13th March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W D.

To the Chairman, Harbour Trust Board.
,, Marine Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 13th.

Recd. *Encl.*

G.O., 13th Mar. 1891, No. 718 W.

MARCH.

Madras Harbour Works

Orders reviewing the amended estimate for the — and recommending it for the formal sanction of the Right Honorable the Secretary of State for India.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

LETTER—from

COLONEL J. PENNYCUICK, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

SIR,

I am directed to forward, for transmission to the Right Honorable the Secretary of State for India, the accompanying copy of Proceedings of this Government, No. 718 W., dated 13th March 1891, reviewing the amended estimate for the Madras Harbour Works drawn up in accordance with the recommendations of Sir Alexander Rendel made after his inspection of the works in February 1890. The amended estimate provides for all work now considered necessary for completion of the harbour with an eastern entrance and I am to recommend that it be laid before the Home Government for formal sanction.

2. I am also to forward a copy of Proceedings, No. 720 W., dated 13th March 1891, in which an estimate, amounting to Rs. 1,55,462, for protecting the foreshore north of the harbour, has been sanctioned, and, in this connection, to invite attention to the note of the Chief Engineer, Public Works Department, recorded with G.O., No. 462 W., dated 16th February 1891, which also forms an accompaniment to this letter. I am to request formal confirmation of the proceedings of Government sanctioning this additional emergent work.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
13th March 1891.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 13th

Recd. *Encl.*

13th Mar. 1891, No. 719 W.

MARCH.

Madras Harbour Works

Forwarding the amended estimate of the — for transmission to the Right Honorable the Secretary of State for India for formal sanction.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From W. P. AUSTIN, Esq., C.S., Chairman, Harbour Trust Board, to the Chief Secretary to Government, dated Madras, 26th February 1891, No. 1954.

In continuation of my letter No. 1691, dated 16th instant, I have now the honor to submit, for information of Government and for the approval of the Right Honorable His Excellency the Governor in Council, under section 64, Act II of 1886, an estimate for extending the rubble revetment protecting the foreshore north of the harbour and I enclose the plan referred to.

2. The Trustees are of opinion that sanction should be accorded to the extension of the protection to the point C.

3. To stop short at B would ensure the destruction of the experimental village lately constructed for the accommodation of the boatmen, and it is necessary in the interests of the work of the port that these men should be located as near as possible to the harbour; they have already been forced to an inconvenient distance by the erosion of the sea.

4. It will be within the recollection of Government that a considerable outlay was sanctioned as a legitimate charge against Port funds to provide accommodation for boatmen. This has been effected by the Board's Secretary to a limited extent in the area which would be protected by the extension of the revetment to C without incurring the expenditure of a single rupee from Port funds by the simple expedient approved by the Trustees of permitting registered boatmen to build their own huts, merely compelling them to conform to regular line, thus giving ample space and ventilation, and I may remark that, although cholera and small-pox were epidemic around this model village in 1890, not a single death from either disease occurred within its limits. It would, therefore, seem a great pity to permit so valuable an adjunct of the port to be washed away and to do so would be a doubtful economy.

ENCLOSURE.

From A. LEE POGSON, Esq., Engineer, Harbour Trust Board, to the Chairman, Harbour Trust Board, dated Madras, 9th February 1891.

I have the honor to inform you that an inspection of the revetment and erosion to the north of the harbour was made by the Chief Engineer, Public Works Department, accompanied by Major Baddeley, R.E., and myself on the morning of the 28th January 1891.

2. After inspecting the plans and examining the position of the past and latest high water marks, it is evident that a further extension of revetment must be made, as shown on accompanying plan in red, to protect Cassimode from the possibility of further erosion this south-west monsoon.

3. The bay formed last year, as shown by the high water mark of 30th September 1890, has now nearly filled up, and the water line is approaching the high water mark of 28th February 1890, and will probably continue to do so until the middle of March when erosion again takes place.

4. The proposal to extend the revetment is made to prevent the roadway and property west of it being washed away should further erosion take place this year and increase the bay formed in September 1890, when the road was only 20 feet from the high water line.

5. It will be impossible to secure *all* the sand secreted up to March on account of the time it will take to deposit the required amount of stone necessary to form the revetment shown in red upon the plan; therefore reckoning the work is commenced at the end of February the erosion will have returned to the high water mark of the 30th June 1890 in *four months*, which is the time the required stone will take to deposit, and, therefore, the position of the revetment must be fixed at the high water mark of the 30th June 1890.

6. Along this high water line I propose to raise a bank of stone (equal in quantity to the stone required to complete the revetment) from A to B on plan, which must be completed in 4 months when the erosion will reach and commence to undermine the bank of stone by the end of June and cause the rubble stone to fall forward and revet the eroding sand quicker than it would be possible to deposit the large amount of stone required at the receding waters-edge.

7. This mode of forming the revetment, if commenced at once (at the position shown), will give me time to collect and deposit the necessary stone before the erosion can have time to return to the June high water line.

8. A revetment so formed will show a great saving in cost per lineal foot of shore reveted, which will be Rs. 41-4-0 per lineal foot against Rs. 66 per lineal foot, as carried out last year, by tipping forward into deep water, which of course was the only alternative then, when the Deputy Traffic Manager's bungalow and land not belonging to the Trust had to be protected, and so far the extension then made at a cost of Rs. 32,274 has had the desired and anticipated effect.

9. The extension now necessary is to secure the accreted sand upon the Trust's property and to prevent the erosion reaching the roadway and further compensation upon private property.

10. To do this, it is necessary to extend the revetment along the line shown and the length of revetment from A to B will be 2,683 feet.

11. At B a bay equal to the high water line of 30th September 1890 will be formed and this will wash away the boatmen's village (*vide* my letter No. 1326, dated 7th February 1890); but no valuable property will be encroached upon and the estimated cost of the revetment will be as below.

12. If the Trustees wish to avoid again moving the boatmen's village further north, the revetment must be extended to C and this extra extension will cost Rs. 27,815.

Madras Harbour Works.—Estimate for extending rubble revetment from the present end opposite Mr. Hutchence's bungalow marked A on plan northwards to the point marked B with an alternative to the point marked C on plan.

N.B.—The point B is 2,683 feet from A.
„ C is 637 „ B.

Item.	Quantity.	Description of work.	Rate.	Per	Amount.
			RS. A. P.		RS. A. P.
1	4,200 tons.	Rubble in making up old revetment at masula boat bay and head at end marked D on plan	2 1 0	Ton	8,662 8 0
2	...	Laying down line from existing siding to south end of proposed revetment point A	..	..	..
	680 l. feet.	Narrow gauge siding with 40 lb. rails	2 6 8	L. foot	1,643 5 4
3	1 set	Points and crossings	140 0 0	Set	140 0 0
4	680 c.yds	Sand embankment to connect new siding with old ..	0 1 0	C. yard	42 8 0
5	2,683 l. ft.	Rubble stone revetment at 20 tons per lineal foot and Rs. 2-1-0 per ton, or	41 4 0	L. foot	1,10,673 12 0
6	2,683 „	Narrow gauge siding, 40 lb. rails	2 6 8	..	6,483 14 8
		Total for from point A to point B ..	..	..	1,27,646 0 0
7	637 l. ft.	Rubble stone revetment at 20 tons per lineal foot and Rs. 2-1-0 per ton, or	41 4 0	L. foot	26,276 4 0
8	637 „	Narrow gauge siding, 40 lb. rails	2 6 8	..	1,539 6 8
		Total for from point A to C point ..	..	..	1,55,461 10 8

13. Early orders should be issued to enable me to secure and lay down at once the necessary railway materials to extend the revetment from A to B, the cost of which under items 2, 3, 4 and 6 of the above estimate amounts to Rs. 8,309-12-0.

14. Sanction should also be given to the outlay under item 1 (Rs. 8,662-8-0) to enable me to reform at once the mound at the end of the extension made to the revetment last year marked D on plan, which work is necessary and must be completed early in March.

Transferred to the Public Works Department.

2nd March 1891. (Signed) J. F. PRICE,
Chief Secretary.

Note by the Chief Engineer, Public Works Department.

The general arrangements for extending the protective revetment and for which work estimates are now submitted by the Engineer, Harbour Trust Board, Madras, being in accordance with the views expressed by the undersigned in his memorandum embodied with G.O., No. 426 W., dated 16th February 1891, are approved.

2. The proposal to fix the position of the revetment at the line of high water mark of the 30th June 1890 is accepted.

3. The undersigned concurs with the opinion expressed by the Trustees of the Harbour Trust Board that it is advisable that the revetment should not stop short at B (on plan), but that it should be extended as far as C and thus obviate the necessity of again having to move the boatmen's village.

4. The undersigned observes that it is proposed that the stone required to complete the revetment should, in the first place, be raised in a bank, the actual formation of the revetment being performed by the action of erosion. To this method he raises no objection, but he would like to see the section which it is proposed to give to the bank of stones.

5. With these remarks the undersigned recommends that sanction be given to the estimate, amounting to Rs. 1,55,461-10-8.

March 1891. (Signed) J. PENNYCUICK, Colonel, R.E.,
Chief Engineer, P.W.D.

ORDER—dated 13th March 1891, No. 720 W., Public Works.

The estimate, amounting to Rs. 1,55,462, for extending the rubble revetment protecting the foreshore north of the Harbour works, is sanctioned as proposed.

2. Attention is called to the remarks of the Chief Engineer, Public Works Department, recorded above.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chairman, Harbour Trust Board, with plan.
„ Marine Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 13th.

Recd. *Encl.*

G.O., 13th Mar. 1891, No. 720 W.

MARCH.

Foreshore north of the Madras Harbour Works

Estimate of Rs. 1,55,462 for extending the rubble revetment protecting the —, sanctioned.

MADRAS HARBOUR WORKS.

Estimate for work required to be done after the 15th October 1890 to complete the Harbour with an eastern entrance.

MADRAS HARBOUR WORKS.

COMPARISON of expenditure with sanctioned estimate up to 15th October 1890.

Number of item.	Sub-head of work.	As per estimate. Quantity.	Rate.	Per	Cost.	As executed. Quantity.	Rate.	Cost. Total up to 30th June 1890.	Probable during the months of July, Aug., Sept. and up to 15th Oct. 1890.	Up to date.	Arrears not paid.	Grand total as compared with estimate.	Remarks.
	1	2	3	4	5	6	7	8	9	10	11	12	13
			RS. A. P.		RS.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
	AS PER OLD ESTIMATE.												
1	Works	..	..	..	49,15,752	..	..	55,09,324 8 10	..	55,09,324 8 10	..	55,09,324 8 10	Old estimate. Total outlay up to 31st December 1884.
2	Establishment	..	..	..	3,57,612	..	..	5,29,904 0 0	..	5,29,904 0 0	..	5,29,904 0 0	
3	Tools and plant	..	..	..	4,71,801	..	..	5,15,262 6 0	..	5,15,262 6 0	..	5,15,262 6 0	
	Total ..	..	..	..	57,45,165	..	..	65,54,490 14 10	..	65,54,490 14 10	..	65,54,490 14 10	
	NEW ESTIMATE.												
4	Alteration and extension of block ground .. Prely.	..	..	..	8,000	..	..	5,882 3 5	..	5,882 3 5	9 13 6	5,892 0 11	
	NORTH PIER.												
	Rubble stone in foreshore and base.												
5	Ordinary deposited from break-water .. Tons.	5,532	1 8 0	Ton.	8,297	2,780	1 12 0	4,865 0 0	..	4,865 0 0	..	4,865 0 0	
6	Do. from boats .. ,,	182,260	2 0 0	,,	3,64,520	204,605½	2 0 5	3,95,753 4 7	8,572 6 11	4,04,325 11 6	10,312 12 1	4,14,638 7 7	
7	Large ordinary deposited under wave-breaker from break-water .. .. ,,	14,750	1 12 0	,,	25,812	11,149¾	1 12 0	19,512 9 0	..	19,512 9 0	..	19,512 9 0	
8	Concrete blocks for building .. .. .. C. yds.	58,116	9 0 0	C. yd.	5,23,044	36,930 6/27	11 5 4	3,46,229 0 5	72,359 6 2	4,18,588 6 7	..	4,18,588 6 7	
9	Setting blocks at commencement of new work. ,,	2,062	2 0 0	,,	4,124	2,615 4/5	2 1 1	5,414 11 2	..	5,414 11 2	..	5,414 11 2	
10	Do. from 2,200 to 3,600 feet .. .. ,,	35,245	2 8 0	,,	88,112	34,314 20/27	2 13 3	77,154 0 1	17,726 3 0	94,880 3 1	2,180 12 6	97,060 15 7	
11	Do. at pier head .. ,,	20,809	3 0 0	,,	62,427	..	..		..	..	..	..	
12	Concrete in mass for filling ,,	500	10 0 0	,,	5,000	263	4 8 3	1,188 0 7	..	1,188 0 7	..	1,188 0 7	
	Wave-breaker.												
13	Built blocks .. .. ,,	288	10 0 0	,,	2,880	288	9 5 7	2,692 0 0	..	2,692 0 0	..	2,692 0 0	
14	Ordinary concrete blocks. ,,	70,849	9 0 0	,,	6,37,641	55,232 23/36	10 14 6	5,50,368 6 2	51,880 8 0	6,02,248 14 2	..	6,02,248 14 2	
15	Depositing do. .. ,,	70,849	1 0 0	,,	70,849	55,809 23/54	0 12 7	41,768 3 9	1,293 11 1	43,061 14 10	915 4 11	43,977 3 9	

Comparison of expenditure with sanctioned estimate up to 15th October 1890—*cont.*

Number of item.	Sub-head of work.	As per estimate.				As executed.		Cost.					
		Quantity.	Rate.	Per.	Cost.	Quantity.	Rate.	Total up to 30th June 1890.	Probable during the months of July, Aug., Sept. and up to 15th Oct. 1890.	Up to date.	Arrears not paid.	Grand total as compared with estimate.	Remarks.
	1	2	3	4	5	6	7	8	9	10	11	12	13
			RS. A. P.		RS.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
	Wave-breaker—cont.												
16	Apron blocks .. .. C. yds.	1,667	9 0 0	C. yd.	15,003	}							
17	Setting do. .. .. ,,	1,667	4 0 0	,,	6,668	} 242$\frac{3}{9}$	10 4 1	..	1,853 11 11	1,853 11 11	628 3 3	2,481 15 2	
18	Concrete in bags .. ,,	742	12 0 0	,,	8,904	}							
19	Cramps .. .. No.	330	10 0 0	Each.	3,300	245	9 3 9	2,240 4 7	6 13 6	2,247 2 1	15 11 11	2,262 14 0	
20	Concrete capping .. C. yds.	22,400	10 0 0	C. yd.	2,24,000	444$\frac{5}{6}$	19 13 2	8,817 4 7	3 7 0	8,820 11 7	..	8,820 11 7	
	Total for North pier ..	..	..	..	20,50,581	..	..	14,56,002 12 11	1,53,696 3 7	16,09,699 0 6	14,052 12 8	16,23,751 13 2	
	SOUTH PIER.												
	Rubble stone in foreshore and base.												
21	Ordinary deposited from break-water .. Tons.	675	1 8 0	Ton.	1,013	..	..	..	..	..	..	..	
22	Do. from boats .. ,,	169,517	2 0 0	,,	3,39,034	168,860$\frac{3}{4}$	2 9 4½	4,27,837 10 8	3,854 11 4	4,31,692 6 0	4,925 14 8	4,36,618 4 8	
23	Large, deposited from break-water .. .. ,,	15,038	1 12 0	,,	26,317	8,614$\frac{3}{4}$	1 12 0	15,075 13 0	..	15,075 13 0	..	15,075 13 0	
24	Concrete blocks for building .. .. C. yds.	52,153	9 0 0	C. yd.	4,69,377	34,715$\frac{19}{27}$	10 14 5	3,59,969 4 4	18,442 8 8	3,78,411 13 0	..	3,78,411 13 0	
25	Setting blocks at commencement .. ,,	2,062	2 0 0	,,	4,124	2,556	3 1 6	7,911 13 3	..	7,911 13 3	..	7,911 13 3	
26	Do. from 2,550 to 3,700 feet .. .. ,,	29,282	2 8 0	,,	73,205	30,160$\frac{1}{2}$	3 7 11	1,05,461 9 4	..	1,05,461 9 4	..	1,05,461 9 4	
27	Do. at pier head .. ,,	20,809	3 0 0	,,	62,427	1,998$\frac{20}{27}$	14 10 8	10,076 2 4	16,768 12 2	26,844 14 6	2,472 1 6	29,317 0 0	
28	Concrete in mass for filling .. .. .. ,,	500	10 0 0	,,	5,000	602	7 9 1	4,554 14 4	..	4,554 14 4	..	4,554 14 4	
	Wave-breaker.												
29	Concrete blocks .. .. ,,	57,066	9 0 0	,,	5,13,594	37,044$\frac{1}{188}$	11 1 11	3,99,832 4 7	12,180 6 0	4,12,012 10 7	..	4,12,012 10 7	
30	Depositing blocks .. ,,	57,066	1 0 0	,,	57,066	37,526$\frac{755}{786}$	1 4 1	45,197 3 1	1,362 2 8	46,559 5 9	630 5 11	47,189 11 8	
31	Apron do. .. ,,	1,667	9 0 0	,,	15,003	}							
32	Setting do. .. ,,	1,667	4 0 0	,,	6,668	} 956$\frac{17}{36}$	9 3 2	6,415 12 2	2,378 9 1	8,794 5 3	..	8,794 5 3	
33	Concrete in bags .. ,,	742	12 0 0	,,	8,904	}							
34	Cramps .. .. No.	275	10 0 0	Each	2,750	186	11 12 2	2,167 12 8	5 13 8	2,173 10 4	13 12 0	2,187 6 4	
35	Concrete capping .. C. yds.	19,200	10 0 0	C. yd.	1,92,000	590$\frac{11}{12}$	20 12 5	12,184 1 3	95 4 2	12,279 5 5	..	12,279 5 5	
	Total for South pier ..	..	..	..	17,76,482	..	..	13,96,684 5 0	55,088 3 9	14,51,772 8 9	8,042 2 1	14,59,814 10 10	

36	Tools and plant	..	..	..	3,19,529	..	..	4,30,237 11 9	41,549 15 1	4,71,787 10 10	653 3 0	4,72,440 13 10
		..	..	..	3,19,529	..	..	..	..	..	..	4,72,440 13 10
37	Contingencies at 2½ per cent. ..	..	..	..	1,03,865	..	..	72,625 13 3	1,450 5 1	74,076 2 4	7,158 4 11	81,234 7 3
		..	..	..	1,03,865	..	..	..	..	..	..	81,234 7 3
38	Lighting entrance	..	..	..	20,000	..	..	..	..	..	..	..
39	Establishment	..	..	..	3,11,594	..	..	3,73,933 0 3	17,814 8 2	3,91,747 8 5	100 4 6	3,91,847 12 11
		..	..		3,11,594	..	..	..	..	..	..	3,91,847 12 11
40	Materials at site (concrete blocks in yards) .. C. yds.	..	..	..	..	15,575⅘	13 9 8	2,18,360 12 9	—23,210 14 0	1,95,149 14 9	16,718 15 10	2,11,868 14 7
41	Advances to work people ..	..	..	..	..	..	..	4,970 14 5	..	4,970 14 5	..	4,970 14 5
42	Other stores	..	..	..	..	..	..	..	..	..	..	..
43	Protective works	..	..	..	..	28,796	2 1 4	38,849 3 0	17,355 3 6	56,204 6 6	3,744 6 9	59,948 13 3
	Total of estimate and value of work done	..	..	..	45,90,051	..	..	39,97,546 12 9	2,63,743 9 2	42,61,290 5 11	50,479 15 3	43,11,770 5 2
	Deduct probable recoveries due to sales of tools and plant ..	..	..	..	..	..	..	—42,971 6 3	— 900 0 0	—43,871 6 3	..	—43,871 6 3
	Total ..	..	..	..	45,90,051	..	..	39,54,575 6 6	2,62,843 9 2	42,17,418 15 8	50,479 15 3	42,67,898 14 11
	Deduct arrears due	..	..	..	..	..	..	..	..	..	..	..
	Total outlay to date by books ..	..	..	..	..	..	..	..	..	..	..	..
	Deduct total outlay to end of last year	..	..	..	..	..	..	..	..	..	..	..
	Total ..	..	..	..	..	..	..	..	..	..	..	..
	Deduct value of stock	..	..	..	..	..	..	..	..	..	..	..
	Total ..	..	..	..	..	..	..	..	..	..	..	..
	Add net debits to suspense heads during the year	..	..	..	..	..	..	..	..	..	..	..
	Net debits of the year	..	..	..	..	..	..	..	..	..	..	..
	Grant for 188 -8 , .. Rupees.	..	..	..	..	..	..	..	..	..	..	..

Madras,
21st November 1890.

(Signed) A. LEE POGSON,
Engineer, Harbour Trust Board.

	RS.
Sanctioned estimate (G.O., No. 2251 W., dated 8th September 1886)	45,90,051
Total expenditure to 15th October 1890	42,67,899
Balance ...	3,22,152

	FT.	INS.
North pier—		
Total length when complete	3,848	9
Do. completed up to 15th October 1890	3,497	8
Total length of pier to be completed ...	351	1
South pier—		
Total length when complete	3,981	3
Do. completed up to 15th October 1890	3,749	8
Total length of pier to be completed ...	231	7

Estimate for work to be done after the 15th October 1890 to complete the harbour with an eastern entrance as called for in letter No. 174 E., of 9th June 1890, from Chairman, Harbour Trust Board, forwarding G.O., Financial No. 385 of 26th May 1890.

Number of item.	Quantity.	Description of work,	Rate.	Per	Amount.	Total.
		North pier.	RS. A. P.		RS.	RS.
1	1,290 Tons.	Additional rubble to make up rubble base ..	2 0 0	Ton.	2,580	..
2	82 L. feet.	Blockwork in pier to be done up to pier head (setting only)	103 12 0	L. ft.	8,508	..
3	857 C. yds.	Concrete blocks—materials only	11 0 0	C. yd.	9,427	..
4	82 L. feet.	Wave-breaker (40 feet wide)	334 0 0	L. ft.	27,388	..
5	1,200 „	Do. (12 „)	100 4 0	,,	1,20,300	..
6	1,444 C. yds.	Concrete in protection to rubble base	10 4 0	C. yd.	14,801	..
7	13 No.	Cramps, iron	10 12 0	Each.	140	..
8		Add for pier head, including rubble, superstructure, wave-breaker, setting, concrete protection to base and cramps	..	Sum	3,05,436	..
		Total of north pier, less concrete, capping, and caisson at pier head	..	..	..	4,88,580
		South pier.				
9	1,523 Tons.	Additional rubble to make up rubble base ..	2 0 0	Ton.	3,046	..
10	444 C. yds.	Concrete in protection to rubble base	10 4 0	C. yd.	4,551	..
		Add for pier head complete, including rubble, superstructure, wave-breaker, concrete protection, caisson and cramps, &c.	..	Sum	3,57,878	..
11		Total of south pier complete, less concrete capping.	..	..	3,65,475	8,54,055
12		New plant and repairs to machinery, extra railway lines and sleepers	..	..	1,39,215	..
		Total of north and south piers	..	..	9,93,270	..
13		Add 10 per cent. for establishment	..	..	99,327	..
14		Do. 5 do. for contingencies	..	..	49,664	..
			..	..	11,42,261	..
15		Deduct sale-proceeds of tools and plant on completion of works	..	..	2,33,460	..
		Total to complete eastern entrance from 15th October 1890 without north pier caisson and capping to both piers	..	..	9,08,801	..
16		Add outlay to 15th October 1890 (approximate) ..	..	..	42,67,899	..
		Total cost of sanctioned design complete, as above.	..	..	..	51,76,700
17		Add cost of north pier caisson and setting in position	..	..	84,750	..
18	15,907 C. yds.	Add capping to north pier	11 0 0	C. yd.	1,74,977	..
19	15,656 „	Do. do. south pier	11 0 0	,,	1,72,216	..
		....	..	..	4,31,943	..

Estimate for work to be done after the 15th October 1890 to complete the harbour with an eastern entrance, &c.—*cont.*

Number of item.	Quantity.	Description of work.	Rate.	Per.	Amount.	Total.
		South pier—cont.	RS. A. P.		RS.	RS.
20		Add 10 per cent. for establishment	..	..	43,194	..
21		Do. 5 do. for contingencies	..	..	21,597	..
		Total of capping to both piers and north pier caisson	..	..	4,96,734	56,73,434
		Total of north and south piers completed in accordance with sanctioned design, eastern entrance	..	..	56,73,434	..
22		Deduct total of original estimate for sanctioned design	..	..	45,90,051	..
23		Balance for which sanction is required to complete eastern entrance after 15th October 1890 ..	..	..	10,83,383	10,83,383
		Abstract of estimate.				
		To complete north and south piers less the capping and the north pier caisson	..	..	..	9,08,801
		Add outlay to 15th October 1890	..	..	..	42,67,899
		Total cost of harbour completed less concrete capping and north pier caisson	..	..	..	51,76,700
		Deduct original estimated cost of sanctioned design	..	..	..	45,90,051
		Balance required to complete north and south piers without the concrete capping and the north pier caisson	..	..	..	5,86,649
		Add cost of capping to both piers and cost of setting north pier caisson	..	..	..	4,96,734
		Total balance required to complete harbour ..	..	..	..	10,83,383
		Add sanctioned estimate	..	..	..	45,90,051
		Total cost of harbour eastern entrance with capping and caisson completed	..	..	..	56,73,434

MADRAS,
21st November 1890.

(Signed) A. LEE POGSON,
Engineer, Harbour Trust Board.

Statement showing what the work done up to the 15th October 1890 would have cost had it been carried out at the rates allowed by Mr. Parkes in his estimate of 1884, submitted in compliance with the Board's memo. No. 506 E. of 5th January 1891 calling for further report in support of the estimate of 21st November 1890, amounting to Rs. 10,83,383, for completing the harbour.

Number of item.	Description of work.	Quantity of work done up to 15th October 1890.	As per Mr. Parkes' estimate. Rate.	As per Mr. Parkes' estimate. Per	Cost of work done at Mr. Parkes' rates.	Actual cost of work done.	Saving upon Mr. Parkes' estimate.	Loss upon Mr. Parkes' estimate.
			RS. A. P.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
	NEW ESTIMATE.							
4	Alteration and extension of block ground	..	..	..	8,000 0 0	5,892 0 11	2,107 15 1	..
	NORTH PIER.							
	Rubble stone in foreshore and base.							
5	Ordinary deposited from break-water	2,780 Tons.	1 8 0	Ton.	4,170 0 0	4,865 0 0	..	695 0 0
6	Do. from boats	204,605½ ,,	2 0 0	,,	4,09,211 0 0	4,14,638 7 7	..	5,427 7 7
7	Large ordinary deposited under wave-breaker from break-water.	11,149¾ ,,	1 12 0	,,	19,512 1 0	19,512 9 0	..	0 8 0
8	Concrete blocks for building	36,930 5/27 C. yds.	9 0 0	C. yds.	3,32,371 10 8	4,18,588 6 7	..	86,216 11 11
9	Setting blocks at commencement of new work	2,615⅗ ,,	2 0 0	,,	5,230 14 3	5,414 11 2	..	183 12 11
10	Do. from 2,200 to 3,600 feet	34,314 20/27 ,,	2 8 0	,,	85,786 13 8	97,060 15 7	..	11,274 1 11
11	Do. at pier head	..	3 0 0	,,	..	..	..	..
12	Concrete in mass for filling	263 ,,	10 0 0	,,	2,630 0 0	1,188 0 7	1,441 15 5	..
	Wave-breaker.							
13	Built blocks	288 ,,	10 0 0	,,	2,880 0 0	2,692 0 0	188 0 0	..
14	Ordinary concrete blocks	55,232 23/36 ,,	9 0 0	,,	4,97,093 12 0	6,02,248 14 2	..	1,05,155 2 2
15	Depositing do.	56,809 23/54 ,,	1 0 0	,,	55,809 6 10	43,977 3 9	11,832 3 1	..
16	Apron blocks	..	9 0 0	,,	..	..	..	..
17	Setting	242⅗ ,,	4 0 0	,,	3,074 7 3	2,481 15 2	592 8 1	..
18	Concrete in bags	..	12 0 0	,,	..	..	..	..
19	Cramps	245	10 0 0	Each.	2,450 0 0	2,262 14 0	187 2 0	..
20	Concrete capping	444⅝ ,,	10 0 0	C. yd.	4,448 5 4	8,820 11 7	..	4,372 6 3
	Total for North pier ..	..	..	..	14,32,668 7 0	16,29,643 14 1	16,349 11 8	2,13,325 2 9
	SOUTH PIER.							
	Rubble stone in foreshore and base.							
21	Ordinary deposited from break-water	..	1 8 0	Ton.	1,013 0 0	..	1,013 0 0	..
22	Do. from boats	168,860¾ Tons.	2 0 0	,,	3,37,721 8 0	4,36,618 4 8	..	98,896 12 8
23	Large deposited from break-water	8,614¾ ,,	1 12 0	,,	15,075 13 0	15,075 13 0	..	..
24	Concrete blocks for building	34,715 13/27 C. yds.	9 0 0	C. yds.	3,12,439 5 4	3,78,411 13 0	..	65,972 7 8
25	Setting blocks at commencement	2,556 ,,	2 0 0	,,	5,112 0 0	7,911 13 3	..	2,799 13 3
26	Do. from 2,550 to 3,700 feet	30,160⅓ ,,	2 8 0	,,	75,401 4 0	1,05,461 9 4	..	30,060 5 4
27	Do. at pier head	1,998 20/27 ,,	3 0 0	,,	5,996 3 7	29,317 0 0	..	23,320 12 5
28	Concrete in mass for filling	602 ,,	10 0 0	,,	6,020 0 0	4,554 14 4	1,465 1 8	..

	Wave-breaker.							
29	Concrete blocks	37,044 1/168 C. yds.	9 0 0	C. yd.	3,33,396 0 10	4,12,012 10 7	..	78,616 9
30	Depositing blocks	37,526 700/756 ,,	1 0 0	,,	37,527 0 0	47,189 11 8	..	9,662 11 8
31	Apron do.	..	9 0 0	,,	..	..	..	..
32	Setting do.	956 17/36 ,,	4 0 0	,,	12,140 3 6	8,794 5 3	3,345 14 3	..
33	Concrete in bags	..	12 0 0	,,	..	..	..	..
34	Cramps	186 No.	10 0 0	Each.	1,860 0 0	2,187 6 4	..	327 6 4
35	Concrete capping	590 11/12 C. yds.	10 0 0	C. yd.	5,909 2 8	12,279 5 5	..	6,370 2 9
	Total for South pier ..	..	..	..	11,49,611 8 11	14,59,814 10 10	5,823 15 11	3,16,027 1 10
36	Tools and plant	..	..	..	3,19,529 0 0	4,72,440 13 10	..	1,52,911 13 10
37	Contingencies at 2½ per cent.	..	..	..	1,03,865 0 0	81,234 7 3	22,630 8 9	..
38	Lighting entrance	..	..	..	20,000 0 0	..	20,000 0 0	..
39	Establishment	..	..	..	3,11,594 0 0	3,91,847 12 11	..	80,253 12 11
40	Materials at site (concrete blocks in yards)	15,575 4/9 C. yds.	9 0 0	C. yd.	1,40,179 0 0	2,11,868 14 7	..	71,689 14 7
41	Advances to work people	..	..	..	..	4,970 14 5	..	4,970 14 5
42	Other stores	..	..	..	..	..	..	..
43	Protective works—rubble stone	28,796 Tons.	2 1 4	Ton.	..	59,948 13 3	..	59,948 13 3
44	Total value of work done	..	..	..	..	43,11,770 5 2	..	..
45	Deduct probable recoveries due to sales of tools and plant	..	..	..	..	43,871 6 3	43,871 6 3	..
	Total ..	..	..	..	..	42,67,898 14 11	1,08,675 10 7	8,99,127 9 7
46	Balance which would have been available had Mr. Parkes' rates been sufficient							7,90,451 15 0
47	Additional sum now asked for to complete the harbour as per estimate of 21st November 1890							10,83,383 0 0
48	Deduct for extra machinery not allowed for in Mr. Parkes' estimate, Rs. 1,39,215 + 15 per cent. ..							1,60,097 0 0
								9,23,286 0 0
49	Deduct advances to work people, Rs. 4,970-14-5, and protective works, Rs. 59,948-13-3							64,920 0 0
								8,58,366 0 0
50	Deduct extra work in pier heads as ordered by Sir Alexander Rendel, K.C.I.E.							2,60,000 0 0
51	Balance which would have been required to complete the harbour as per Mr. Parkes' design and rates							5,98,366 0 0
52	Balance which would have been on hand upon the completion of the work had it been carried out at Mr. Parkes' rates after deducting extra work in pier heads and tools and plant, protective works and advances to work people, all being extras upon the original estimate for reconstruction							1,92,085 15 0

Details of cost of pier heads.

Quantity.	Description of work.	Rate.	Per.	Amount.
	NORTH PIER HEAD (ITEM 8).	RS. A. P.		RS. A. P.
216 L. ft.	Coursed blockwork labor	539 0 0	L. ft.	1,16,424 0 0
8,452 C. yds.	Do. material	11 0 0	C. yd.	92,972 0 0
1,000 Tons.	Rubble stone to make up base ..	2 0 0	Ton.	2,000 0 0
270 L. ft.	Wave-breaker, 40 feet wide	334 0 0	L. ft.	90,180 0 0
73 No.	Iron cramps	10 12 0	Each.	785 0 0
300 C. yds.	Concrete protection to rubble base ..	10 4 0		3,075 0 0
		..		3,05,436 0 0

Quantity.	Description of work.	Rate.	Per.	Amount.
	SOUTH PIER HEAD (ITEM 11).	RS. A. P.		RS. A. P.
166 L. ft.	Coursed blockwork labor ..	..	..	1,07,528 0 0
5,652 C. yds.	Do. material ..	11 0 0	C. yd.	62,172 0 0
2,355 ,,	Concrete in cylindrical pier head ..	15 0 0	..	35,325 0 0
184 ,,	Do. in filling in between coursed blockwork and caisson	15 0 0	..	2,760 0 0
4,694 Tons.	Rubble stone to make up base ..	2 0 0	Ton.	9,388 0 0
270 L. ft.	Wave-breakers, 40 feet wide ..	334 0 0	L. ft.	90,180 0 0
73 No.	Iron cramps	10 12 0	each.	785 0 0
300 C. yds.	Concrete protection to rubble base ..	10 4 0	C. yd.	3,075 0 0
1 No.	Iron caisson	..	Sum.	18,000 0 0
	Preparing base for and setting cylindrical pier head	..	..	28,665 0 0
		..		3,57,878 0 0

MADRAS,
9th January 1891.

(Signed) A. LEE POGSON,
Engineer, Harbour Trust Board.

Remarks on the various items in the preceding comparative statement.

Items 5, 6 & 7. Due to excess quantity required on account of base being washed down pending settlement of question of position of entrance.

Item 8. Due to increased cost of cement and to increased proportion of it used in the concrete, as ordered by Mr. Parkes subsequently to the making of his estimate. The cost of cement has increased from Rs. 37½ per ton, when the estimate for the restoration was framed, to Rs. 52 at the present time. This increase has been due to the fall in exchange, freight, additional charge of 3 per cent. made by the India Office, and in prime cost in England. The increase in expenditure under this head amounts to Rs. 2,48,837. The loss under increased consumption due to increased proportion ordered by Mr. Parkes has been Rs. 69,500. The sum of these two items is Rs. 3,18,337. The total of the losses under items 8, 14, 20, 24, 29, 31, 32, 33, 35 and 40 is Rs. 3,73,393, the balance (Rs. 55,056) is the value of block moulds and joggle boxes in the yards and includes all repairs, alterations and cost of special moulds made for the abutment, for which no provision was made in the original estimate.

,, 10. Due to the necessity of maintaining the full staff of trained employés during suspension of work (from April 1887 to February 1889) pending settlement of the question of position of entrance. The actual loss due to this stoppage was Rs. 1,44,761. There was also a loss of Rs. 8,665 due to setting wave-breakers in orderly rows at north pier, which wave-breakers had to be taken up again; also to a stoppage pending settlement of abutment question. The total of these two items is Rs. 1,53,426. The total of the losses under items 10, 26, and 39 is Rs. 1,21,588. The amount, namely Rs. 31,838, to credit in this case is due to the uninterrupted rapid progress made since the questions above mentioned have been settled.

,, 14. See remark under item 8.

,, 20. Do. do.

,, 22. Due to establishment having been maintained during the years 1882 to 1885 when but little progress was being made pending sanction for reconstruction.

,, 24. See remark under item 8.

,, 25. Due to difficulties in execution owing to position of work and to heavy seas already reported at recommencement of works.

,, 26. See remark under item 10.

,, 27. Due to unsuitability of present Titan cranes to build a wall so wide as 38 feet, entailing extra labor and delay in setting.

,, 29. See remark under item 8.

,, 30. Due to difficulty in depositing blocks with Titan crane as was done previous to the transfer of the wave-breaker crane from north pier in 1888.

Items 31, 32, 33. See remark under item 8.

Item 35. Do. do.

,, 36. Due to the additional time taken in carrying out the work, which has involved expensive repairs to old machinery and the purchase of new. A considerable recovery will be made, however, upon the completion of the work, as most of the machinery will still be serviceable and some almost new.

,, 39. See remark under item 10.

,, 40. See remark under item 8.

,, 48. This item includes the cost of new all round Titan crane erected and all extra plant necessary to complete the harbour.

,, 49. No provision was made for protective works in the original estimate for reconstruction, therefore this item must be deducted to arrive at a comparative statement.

,, 50. These works comprise two concrete cylindrical pier heads (including steel caissons), Rs. 1,94,926; extra block work for an additional 6 feet in depth, Rs. 41,156; and extra labor in lowering the rubble base by divers, the base being already made up to the level originally intended, Rs. 23,918.

Time of completion.—Assuming that fair setting weather is experienced, both north and south piers (including pier-heads) will be completed by the end of October 1892. The new work must be allowed one monsoon to settle. The capping will be commenced in February 1893 and completed in October 1893.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From Lieut.-Colonel R. R. E. DRAKE-BROCKMAN, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated 25th February 1891, No. 102 W.

I have the honor to submit, for sanction of Government, a revised estimate, amounting to Rs. 5,300, for alterations and improvements to the clerks' office building at Stonehouse, Ootacamund.

2. The excess (Rs. 360) over the original estimate of Rs. 4,940 sanctioned in the circle register No. 100 of 1890-91 is due to the rate allowed for jungle wood (ben teak) wrought and put up, viz., Rs. 2 being found insufficient, as it cannot be done at less than Rs. 3-8-0 a cubic foot.

3. I may add that the original estimate was approved of in G.O., No. 3035 W. of 14th November 1890.

Note by the Chief Engineer, Public Works Department.

Submitted, for sanction, with the remark that the schedule rate for jungle wood wrought and put up in the Nílgiri sub-division being Rs. 3-8-0 per cubic foot, there seems to be no reason why this rate should not have been entered in the estimate in the first case.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Chief Engineer, P.W.D.

ORDER—dated 13th March 1891, No. 721 W., Public Works.

The revised estimate, amounting to Rs. 5,300, for improvements to the Secretariat offices on Stonehouse Hill, Ootacamund, is sanctioned in supersession of the estimate of Rs. 4,940 sanctioned by the Superintending Engineer.

2. Attention is drawn to the note by the Chief Engineer, Public Works Department, above recorded.

3. This sanction has been registered as Provincial No. 109 W. of 1890-91 and classified as Civil buildings, Original works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle, with two enclosures.
" Examiner, Public Works Accounts.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 13th.

Recd. *Encl.*

G.O., 13th Mar. 1891, No. 721 W.

MARCH.

Secretariat Offices

Revised estimate, amounting to Rs. 5,300, for improvements to the — on Stonehouse Hill, Ootacamund, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

G.O., dated 2nd March 1891, No. 157, Financial.

Proceedings of the Board of Revenue (Separate Revenue), dated 3rd February 1891, Mis. No. 306.

C. S. CROLE, ESQ., C.S.

Read the following letter from E. TURNER, Esq., Collector of Madura, to the Secretary to the Commissioner of Salt, Abkári and Separate Revenue, dated 11th January 1891, No. 2:—

I have the honor to submit, duly countersigned, an estimate for Rs. 3,260 received from the Superintending Engineer, VI Circle, for constructing steps in front of the Sea Customs office at Kílakarai and for building an office room. The construction of steps is reported to be necessary for the safety of the office building. There is a provision of Rs. 2,000 for the work in the current year's budget. The Superintending Engineer considers that a sum of Rs. 500 will be enough for expenditure during the current official year on the collection of materials. I request that sanction of Government may be obtained to have the allotment for the work transferred to, and the work carried out by, the Public Works Department.

2. The Superintending Engineer's letter No. 928 M.D., dated 30th December, and its enclosures, plan and estimate are submitted herewith.

Resolution—dated 3rd February 1891, Mis. No. 306.

The Board submits for the sanction of Government a plan and estimate, amounting to Rs. 3,260, for constructing steps in front of the Sea Customs office at Kílakarai and for building an office room.

2. The transfer of Rs. 500 to the Public Works Department proposed by the Collector from the source pointed out in the customs budget of the current year may also be sanctioned.

(A true Copy and Extract.)

(Signed) EDMUND MILLETT,
Assistant Secretary.

No. 1236, Revenue.

Approved and transferred to the Public Works Department.

2. The Financial Department will place the sum of Rs. 500 at the disposal of the Public Works Department.

FORT ST. GEORGE,
21st February 1891.

(Signed) C. A. GALTON,
Secretary to Government.

Order—dated 2nd March 1891, No. 157, Financial.

The Accountant-General will place a sum of Rs. 500 at the disposal of the Public Works Department by transfer from 9. *Customs* in the sanctioned grant of the current year.

(True Extract.)

(Signed) N. S. BRODIE,
Ag. Assistant Secretary.

ORDER—dated 13th March 1891, No. 722 W., Public Works.

The estimate, amounting to Rs. 3,260, for improvements to the Sea Customs office at Kílakarai in the Madura district, is sanctioned.

2. The funds required for the work will be provided from the grant for Provincial Civil works at the disposal of the Public Works Department on application by the Superintending Engineer early in 1891-92. The sum of Rs. 500 allotted by the Financial Department in its Proceedings above recorded is accordingly replaced at the disposal of that department.

3. The sanction accorded in para. 1 of these Proceedings has been registered as Provincial No. 110 W. of 1890-91 and classified as Civil Buildings, Original Works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, VI Circle, with six enclosures.
„ Examiner, Public Works Accounts.
„ Financial Department.
„ Revenue Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 13th.

Recd. *Encl.*

G.O., 13th Mar. 1891, No. 722 W.

MARCH.

Sea Customs Office, Kilakarai, Madura district

Estimate of Rs. 3,260 for improvements to the —, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From G. D. WYBROW, Esq., Superintending Engineer, I Circle, to the Chief Engineer, Public Works Department, dated Dowlaishweram, 20th February 1891, No. 2216 G.D.

I have the honor to forward, herewith, plans and an estimate, amounting to Rs. 7,410, for constructing a road from Poolla to Malikmahamudpur received from the President, District Board, Godávari, and to recommend that the sanction of Government may be obtained to the same.

2. The above estimate has been countersigned by the President and scrutinised by this office.

ORDER—dated 13th March 1891, No. 723 W., Public Works.

The estimate, amounting to Rs. 7,410, for constructing a road from Poolla to Malikmahamudpur in the Godávari district, is sanctioned.

2. This sanction has been registered as Local No. 38 W. of 1890-91.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle.
„ Local and Municipal Department, with 11 enclosures.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 13th.

Recd. *Encl.*

G.O., 13th Mar. 1891, No. 723 W.

MARCH.

Road from Poolla to Malikmahamudpur, Godavari District

Estimate of Rs. 7,410 for constructing a —, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From W. P. AUSTIN, Esq., C.S., Chairman, Harbour Trust Board, to the Chief Secretary to Government, dated Madras, 2nd March 1891, No. 1982.

I have the honor to submit, herewith, for the information of Government, the usual monthly statement of progress made upon the Harbour Works for the month ending 31st January 1891, together with plan.

ENCLOSURES.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras at a meeting held at the offices of the Sea Customs on Friday, the 27th day of February 1891.

* * * * *

11. Examined statement of progress made upon the Madras Harbour Works during January 1891 together with a plan.

Resolved that this report be submitted to Government.

* * * * *

(True Extract.)

(Signed) C. PINSENT,
Secretary, Harbour Trust Board.

PROGRESS STATEMENT No. 13.

MADRAS HARBOUR WORKS.

STATEMENT showing progress during January 1891, as shown on accompanying lithographed plan No. 12.

No. of item.	NOTE.—The figures in *block* type denote for comparison progress and quantity of work done in January 1890. Particulars and quantity of work, &c.	Sub-heads of work. Column	NORTH PIER. Rubble base.	NORTH PIER. Superstructure.	NORTH PIER. Wave-breaker.	NORTH PIER. Concrete capping.	NORTH PIER. Base protection.	SOUTH PIER. Rubble base.	SOUTH PIER. Superstructure.	SOUTH PIER. Wave-breaker.	SOUTH PIER. Concrete capping.	SOUTH PIER. Base protection.	Pallávaram quarries outturn.	Concrete block-making.	Railway lines at works.	Railway lines at quarries.	Railway lines, Sand line.	Railway lines, Beach improvements.	Protective works.	Total expenditure during January 1891.
			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Rubble stone deposited from boats	Tons.	..	..	..	..	..	..	..	..	..	..	..	Block moulds are being altered for the Pier head' curve blocks.	..	..	..	..	..	..
2	Do. do. from wagons	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
3	Total quantity rubble stone received on works ..	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
4	Do. blasted chips do. ..	”	..	..	..	..	..	..	..	..	..	..	542½		..	..	..	..	..	..
5	Do. large stones do. ..	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
6	Concrete blocks, set by divers	Number.	..	**46** 36	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
7	Do. deposited in wavebreaker	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
8	Do. made for superstructure	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
9	Do. do. wavebreaker	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
10	Wrought-iron cramp fixed in position ..	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
11	Total outturn of concrete	C. yds.	..	..	..	53	**Nil.** 184⅘	..	..	..	**Nil.** 35	..	..		..	..	..	..	..	..
12	Advance or progress of completed superstructure ..	Ry. ft.	..	**31¼** 25	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
13	Rubble base protected with concrete	”	..	..	..	..	**Nil.** 166	..	..	..	..	..	..		..	..	..	..	..	..
14	Metre gauge, 40 lb. per yard laid new	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
15	Do. do. relaid or renewed ..	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
16	Do. do. taken up	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
17	Broad gauge, 50 lb. per yard laid new	”	..	**216** 588	..	..	..	..	**570** 1,473	..	..	..	..		..	..	..	**Nil.** 93	..	..
18	Do. do. relaid or renewed ..	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
19	Do. do. taken up	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
20	Titan gauge, 75 lb. per yard laid new	”	..	202	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
21	Do. do. relaid or renewed ..	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
22	Do. do. taken up	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
23	....	”	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
24	Approximate expenditure under sub-heads of work ..	Rs.	583	3,531	45	987	1,662	179	3,445	1,551	975	..	59	4,477	151	..	..	..	..	17,645

Casks				TONS	CWTS.	QRS.	LB.
Nil.	casks of cement received on works during January 1891 containing			..	..	..	..
400¼	do.	issued for do.	do. do.	71	9	1	..
20,205¾	do.	balance in store at end of	do. do.	3,608	3	2	15

Quantity due on indents.—Nil.

MADRAS,
13th February 1891.

(Signed) A. LEE POGSON,
Engineer, Harbour Trust Board.

Transferred to the Public Works Department.

7th March 1891.

(Signed) J. F. PRICE,
Chief Secretary.

ORDER—dated 13th March 1891, No. 724 W., Public Works.

Recorded.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chairman, Madras Harbour Trust Board.
„ Marine Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 13th.

Recd. *Encl.*

G.O., 13th Mar. 1891, No. 724 W.

MARCH.

Madras Harbour Works

Progress report of the — for the month of January 1891, recorded.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers:—

From L. L. WICKHAM, Esq., Acting General Superintendent, Public Works Stores, to the Superintending Engineer, V Circle, dated Madras, 23rd February 1891, No. 1716 S.

I have the honor to forward, for submission to Government, the annual indent (in triplicate) for the Public Works stores required from England for the coming official year 1891-92.

2. The total value of the articles indented for amounted to about £6,426, excluding freight payable in England, against the estimated amount of £5,516 as per my letter No. 567 S. of 17th July 1890.

3. The excess of £910 is due to the value of copper tape and plates which were not foreseen when the estimate was submitted.

4. The continuous copper tape is required for lightning conductors to avoid the risk of bad joints caused by cutting a copper sheet into strips and revetting them to form one long tape. The indent includes materials required for manufacturing the jobs in the Public Works Workshops.

No. 93 W.

Forwarded to the Chief Engineer, Public Works Department.

(Signed) D. McN. CAMPBELL, Major, R.E.,
Superintending Engineer, V Circle.

2nd March 1891.

Office-note from the Examiner, Public Works Accounts, dated Madras, 10th March 1891, No. 1461/153.

The accompanying letter from the Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, No. 93 W., dated 2nd March 1891, with an indent (No. 18 of 23rd February 1891) for English stores, for transmission to the Secretary of State, is forwarded for necessary action.

2. I certify that funds to meet the estimated outlay in England in connection with this indent during the year 1891-92 will be provided by the Local Government to the extent of £7,068-12-8½ in the estimate of the Public Works Department for that year.

ORDER—dated 14th March 1891, No. 743 W., Public Works.

Ordered that the indent be forwarded to the Director-General of Stores, India Office, and a copy to the Government of India for information.

(Here enter No. 744 W., dated 14th March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, V Circle.
,, Examiner, Public Works Accounts.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 14th.

Recd. *Encl.*

G.O., 14th Mar. 1891, No. 743 W.

MARCH.

Indent for Stores required by the Public Works Department during 1891-92

Ordered that the — be forwarded to the Director-General of Stores.

PUBLIC WORKS DEPARTMENT.

General.
Account.

LETTER—from

COLONEL J. PENNYCUICK, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

THE DIRECTOR-GENERAL OF STORES,
INDIA OFFICE,
LONDON,

SIR,

I am directed to forward, herewith, the annual indent (in duplicate) for stores required by the Public Works Department during 1891-92 together with the necessary certificate * by the Examiner of Public Works Accounts.

* Proceedings of Government, No. 743 W., dated 14th March 1891.

(Here enter No. 745 W., dated 14th March 1891.)

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
14th March 1891.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 14th.

Recd. *Encl.*

14th Mar. 1891, No. 744 W.

MARCH.

Indent for Stores required by the Public Works Department during 1891-92

Forwarding the—.

PUBLIC WORKS DEPARTMENT.

General.
Account.

LETTER—from

COLONEL J. PENNYCUICK, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

SIR,

I am directed to forward, for the information of the Government of India, copy of letter to the Director-General of Stores, No. 744 W., dated 14th March 1891, accompanied by a copy of the annual indent referred to therein.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
14th March 1891.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras

PUBLIC WORKS.

Dated March, 14th.

Recd. *Encl.*

14th Mar. 1891, No. 745 W.

MARCH.

Indent for Stores required by the Public Works Department during 1891-92

Forwarding copy of letter to the Director-General of Stores submitting the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following paper :—

From C. VINCENT, Esq., Under Secretary to the Government of India, Public Works Department (Civil Works—Buildings), to the Secretary to the Government of Madras, Public Works Department, dated Calcutta, the 5th March 1891, No. 82 B.

I am directed to acknowledge the receipt of your letter No. 396 W., dated the 12th February 1891, and, in reply, to communicate the confirmation of the Government of India of the scale of rents which it is proposed to fix for certain Government quarters at the Periyár irrigation works which are occupied as residences as detailed in the statement accompanying that letter.

2. As regards the rate of rent which it is proposed to charge the civil apothecary, I am to say that there is no objection to the rates laid down in the Public Works Department Code for overseers being applied to him. But as regards the accountant, I am to say that accountants are not subject to any special scale of rent like supervisors and overseers of the Public Works Department.

ORDER—dated 14th March 1891, No. 746 W., Public Works.

Communicated to the Examiner, Public Works Accounts, and the Superintendent of Works, Periyár Project, for information and guidance. The statement showing the scale of rents now sanctioned is reprinted as an appendix to these Proceedings. The rent to be recovered from the accountant will be assessed in accordance with the ordinary rules and will be determined by the cost of the buildings occupied.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintendent of Works, Periyár Project.
„ Examiner, Public Works Accounts.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 14th.

Recd. *Encl.*

G.O., 14th Mar. 1891, No. 746 W.

MARCH.

Rents

Reply of the Government of India to a reference regarding — to be charged to the civil apothecary and accountant employed on the Periyár works, communicated, with remarks, to the Examiner, Public Works Accounts.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

Proceedings of the Board of Revenue (Land Revenue), dated 21st January 1891, Mis. No. 498.

MR. W. A. HAPPELL.

Read—the following letter from J. HANNAN, Esq., Superintending Engineer, II Circle, to the Collector of the Kistna district, dated 17th December 1890, No. 2332 K.S.

As directed in G.O., No. 1593 W. of 9th June 1890, on G.O., No. 3269 of 28th May 1890, Revenue, I have the honor to forward, herewith, estimates, &c., as per margin, amounting to Rs. 28,400, for constructing a first-class taluk cutcherry at Guruzala in Palnád taluk, and to request that sanction of Government may be obtained in the usual course.

5 Estimates.
1 Specification.
1 Report.
1 Site-plan.
1 Data sheet.
1 Tracing of marble pillar.

2. The necessity for the work is explained in the report accompanying.

3. As requested in your letter No. 6426 of 2nd September 1890, marble pillars have been allowed to the verandahs instead of teak-wood posts as provided for in the type design.

4. I have to inform you that Rs. 3,000 have been applied for this work in letter No. 332 G.L. of 19th October 1890 to the Chief Engineer, Public Works Department, for expenditure in the current official year and, as therein requested, permission may be granted to collect materials in anticipation of sanction to the estimate.

Endorsement by the Collector of the Kistna district, dated Masulipatam, 18th December 1890, No. 9387.

Forwarded to the Board of Revenue.

The estimate will require revision when the new taluk cutcherry plans are received.

Meanwhile sanction may be given to collect materials. The "marble" pillars are ordinary limestone of the country and it is to be desired that it should be made more use of for building.

The Executive Engineer, Eastern division, has recently found an easy method of cutting this marble.

Resolution—dated 21st January 1891, Mis. No. 498.

Submitted to Government with reference to G.O., dated 22nd November 1890, No. 7177, as the Collector says the estimate will have to be revised after the receipt

of the revised plan for first-class taluk offices now under preparation, but sanction may meantime be accorded for the collection of materials.

2. Care should be taken in building this and all other taluk cutcherries that the front of the building faces the north. When this is not done, the afternoon sun shines straight into the Tahsildar's court and into the prisoners' cells, causing great annoyance. The morning sun is agreeable to the prisoners and causes no inconvenience to the taluk establishment as the office is not open before ten except on special occasions.

(A true Copy and Extract.)

(Signed) H. A. SIM,
Acting Secretary.

No. 1372, Revenue.

Approved and transferred to the Public Works Department.

FORT ST. GEORGE,
26th February 1891.

(Signed) C. A. GALTON,
Secretary to Government.

ORDER—dated 14th March 1891, No. 747 W., Public Works.

Communicated to the Superintending Engineer, II Circle, who will re-submit the estimate, with the necessary alterations, after receipt of the revised type design for taluk offices now under preparation. Meanwhile the collection of materials may be proceeded with from the grant provided for the work in the Provincial budget for 1891-92.

2. Para. 2 of the Revenue Board's Proceedings above recorded will be communicated to all Superintending Engineers with the remark that the conditions therein stated should be fulfilled if possible.

3. The Consulting Architect will expedite the submission of the revised type plan of taluk offices.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, II Circle, with 15 enclosures.
To other Superintending Engineers.
To the Consulting Architect to Government.
" Examiner, Public Works Accounts.
" Revenue Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 14th.

Recd. *Encl.*

G.O., 14th Mar. 1891, No. 747 W.

MARCH.

Taluk Cutcherry at Guruzala, Palnad Taluk, Kistna District

Passing orders on estimate submitted by the Revenue Department for the construction of a —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

Read—the following paper :—

Proceedings of the Board of Revenue (Separate Revenue), dated 24th February 1891, Mis. No. 576.

C. S. Crole, Esq., C.S.

Read—the following papers :—

G.O., dated 2nd December 1890, Mis. No. 7428, Revenue.

Reference thereon, dated 6th January 1891.

Letters from the Collectors of Ganjam, Vizagapatam and Godávari, dated 19th January, 23rd January and 3rd February 1891, Nos. 26, 247 and 93, respectively.

Abstract.—Stating that the monthly statement showing the salt passed through certain locks has never been received from the Superintending Engineer, I Circle.

Resolution—dated 24th February 1891, Mis. No. 576.

With reference to the Government Order first read above, the Board begs to state that the Collectors of Ganjam, Vizagapatam and Godávari districts report that the statement referred to in the Government Order is not received in their offices from the Superintending Engineer, I Circle.

2. The statement is not required.

(A true Extract.)

(Signed) EDMUND MILLETT,
Assistant Secretary.

No. 1518, Revenue.

Transferred to the Public Works Department in continuation of G.O., dated 9th July 1890, Mis. No. 4209.

Fort St. George,
6th March 1891.

(Signed) C. A. GALTON,
Secretary to Government

ORDER—dated 14th March 1891, No. 748 W., Public Works.

Item No. 1 of the statement printed with G.O., No. 1150 W., dated 9th April 1890, will be omitted from the list of returns in the I Circle, the statement not being required by the Public Works Department.

(Here enter No. 749 W., dated 14th March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle.
" Examiner, Public Works Accounts.
" Chief Engineer for Irrigation.
" Revenue Department.

ENDORSEMENT—dated 14th March 1891, No. 749 W., Public Works.

Copy of the above forwarded to the Government of India for information in continuation of letter No. 3060 W., dated 17th November 1890.

(By Order.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 14th.

Recd. *Encl.*

G.O., 14th Mar. 1891, Nos. 748, 749 W.

MARCH.

Returns

Forwarding copy of Proceedings directing the omission of the statement showing the salt passed through certain locks from the list of — submitted by Executive Engineers to officers of other departments.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following paper :—

From Lieut.-Colonel R. R. E. DRAKE-BROCKMAN, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated 28th February 1891, No. 113 E.W.

Adverting to G.O., No. 3468 W. of 5th December 1889, directing to submit, in communication with the Collector, an estimate for making the old palace at Chandragiri safe and restoring it in conformity with the original design, I have the honor to report that I have inspected the palace and consider that nothing more can be done at present than what has been hitherto done. Anything further required must be carried out on the principle of making it architecturally a success and the proposal of the Executive Engineer that the Consulting Architect to Government should inspect the building and see what can be done in this direction merits consideration.

Enclosure.

From Major C. C. RAWSON, R E., Executive Engineer, North Arcot division, to the Superintending Engineer, IV Circle, dated Vellore, 2nd February 1891, No. 613 S.E.

With reference to your No. 3468/1 W.-26 N. A., dated 15th January 1891, I have the honor to draw your attention to my letter No. 697 S.E., dated 10th January 1890, and to G.O., No. 731 W., dated 23rd March 1885. I think that the Consulting Architect should be asked to inspect the building and to suggest proposals for what may be considered necessary.

An estimate for Rs. 400 was sanctioned by the Superintending Engineer in his No. 1724, dated 12th July 1890, for the purposes mentioned in my letter No. 439 M., dated 5th August 1889, to the Collector, North Arcot; copy of this letter is attached to G.O., No. 3468 W., dated 5th December 1889; and the work is now in hand. I do not think that anything more is really necessary at present. I would suggest that, on your inspection of the North Arcot division, you should visit the building and decide what had better be done.

Order—dated 14th March 1891, No. 750 W., Public Works.

Communicated to the Public Department with reference to its endorsement of the 29th November 1889 on Proceedings of the Board of Revenue, No. 5109, Mis., dated 24th August 1889.

2. The Government considers that no further action is necessary at present with respect to the restoration of the old palace at Chandragiri.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Public Department.
" Revenue "
" Superintending Engineer, IV Circle.
" Consulting Architect to Government.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 14th.

Recd. *Encl.*

G.O., 14th Mar. 1891, No. 750 W.

MARCH.

Old palace at Chandragiri, North Arcot District

Report on the present state of the —, communicated to the Public Department with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Military Works.
Account.

READ—the following paper :—

From Brigadier-General E. H. EYRE, Quartermaster-General, Madras Army, to the Secretary to Government, Public Works Department (through Military Department), dated Ootacamund, 3rd March 1891, No. 432 M.W. (Accounts —Budget estimate).

I am desired to report, for your information, that, with the approval of Government and in view to the procedure being brought into conformity with that obtaining at stations under the control of the Military Works Department, the Commander-in-Chief has issued instructions that standing barrack committees, which assemble annually to investigate the requirements of corps and departments in regard to original military works, in accordance with the recommendations contained in whose reports the lists of works submitted year by year to Government, for inclusion in the Imperial Military Works budget estimates, are framed, should, in future, be required to report on only such works as are estimated to cost upwards of Rs. 2,500 each.

2. His Excellency feels sure that Government will agree with him as to necessity for the adoption of a similar procedure both at Military Works and Public Works stations and hopes that Government will approve of his action in having issued instructions* accordingly. Lists of minor works for execution during the ensuing financial year, demands for which, it may here be remarked, cannot conveniently be foreseen a year in advance with any degree of certainty, will not consequently be submitted with the programme of major works to be included in the Imperial budget estimate of military works for 1892-93 and subsequent years.

* Copy of circular addressed to General Officers Commanding districts (enclosed).

ENCLOSURES.

CIRCULAR.

No. 430 M.W.

The following instructions are issued for the information and guidance of all concerned in connection with the preparation and submission of the schedules of military works requirements for inclusion in the Imperial Military Works budget estimate of the financial year 1892-93 and subsequent years :—

(1) At all stations in this command, including those under the control of the Military Works Department, as well as those in charge of the Public Works Department, the standing barrack committee will, as heretofore, investigate the requirements of every corps, detachment or Military department (except as noted below in para. 8) so far as original works are concerned. On receipt at district head-quarters of the committee's lists, the works will be tabulated in the order of their importance as urgent or desirable, but without reference to stations or corps, &c., thus the first work in the list will be the most urgent work in the whole district, the second in the list the next most urgent and so on. Works to be undertaken by the Military Works Department should be kept quite distinct from those to be carried out by the Public Works Department and should be shown in separate lists.

(2) The major works lists tabulated, as above directed, should be forwarded by General Officers* Commanding after their remarks have been duly recorded thereon, stating the necessity for each work and giving their opinions on it, so as to reach this office by the 15th May 1891 *at latest*, and it is requested that every endeavour may be made to ensure the punctual submission of these lists to Army head-quarters.

* The schedules of the Burma district should contain the remarks both of the General Officer Commanding the sub-district concerned and of the General Officer Commanding Burma district.

(3) In accordance with the procedure obtaining in Bengal, the standing barrack committee will only report on such works estimated to cost upwards of Rs. 2,500 each. Lists of minor works requiring execution at Military Works and Public Works stations should not therefore be submitted in future either to this office or to that of the Chief Engineer, Military Works.

(4) Items that have been entered in former lists, for the execution of which funds have not been allotted, will be continued and care should be taken not to exclude them without good reason; but when General Officers Commanding are satisfied that the retention of such on the lists is really unnecessary they will not be entered. In such cases the forwarding letter should state the circumstances under which any particular work included in previous lists has been omitted.

(5) Care should be taken that all estimates for major works submitted or requirements considered necessary since the submission of the budget lists for 1891-92 are included in the lists due for 1892-93 and General Officers Commanding should satisfy themselves that the lists are complete in every particular before they are forwarded to head-quarters.

(6) The schedules submitted to this office will not ordinarily include the requirements for repairs, renewals and restorations (such as re-roofing buildings with more permanent material, &c.), which, though really in the nature of repairs, are technically classed as ordinary works. Works of this kind cannot conveniently be reported on by standing barrack committees, as the necessity or otherwise for extensive repairs and renewals can only be decided by those who are professionally responsible for the efficient maintenance of the buildings.

(7) All lists required under the above instructions to be submitted to this office should be forwarded in duplicate and should be prepared in foolscap, not demi-sized paper, in book form, the columns being on both pages and the writing down the page instead of across it. A specimen form is attached, but, as stated above, the returns of the Burma district should contain an additional column for the remarks of the General Officer Commanding Burma district, as well as for those of the General Officer Commanding the sub-district concerned.

(8) As all ordnance works are provided for out of funds placed at the disposal of the Director-General of Ordnance in India, the requirements of the Ordnance Department should not be included in the schedules submitted to this office by General Officers Commanding districts. The requirements of other Military departments should, however, be included in district schedules.

(9) The above instructions apply to all military station situated in the Burma, Secunderabad and Belgaum districts equally with those situated within the limits of the Madras Presidency proper.

(By Order.)

OOTACAMUND, 3rd March 1891.

(Signed) A. G. HUTCHINS, Colonel, *for* Quartermaster-General.

LIST of new buildings, &c., for the troops of the district proposed to be included in the budget list of major works of 1892-93.

Division or district.	Station.	Description of buildings, &c., and for what corps or department needed.	Approximate estimate of cost.	Remarks by the standing barrack committee as to the necessity of the buildings, references to former application, orders of Government, &c.	Remarks by the Officer Commanding division or district.	Remarks by the Commander-in-Chief.
District.		*Cavalry Barrack, XXI Hussars.*	RS.			
	..	One new barrack ..	32,500	Considered very necessary. The present accommodation being insufficient for a cavalry regiment at its present strength of 8 troops strongly recommended; asked for last year.	Very necessary; strongly recommended.	Very necessary; should be provided as soon as funds can be made available.
		Queen's Own Sappers and Miners.				
	..	New brick making shed.	6,000	Very much required. Construction of buildings for Madras Sappers and Miners to be undertaken by the Public Works Department (*vide* O.G., No. 2039 of 21st April 1889). Recommended; asked for last year.	Strongly recommended.	When funds are available.

No. 1400, Military.

Forwarded.

FORT ST. GEORGE, 6th March 1891.

(Signed) A. KENNEY-HERBERT, Brigdr.-Genl., Secretary to Government.

ORDER—dated 14th March 1891, No. 751 W., Public Works.

The Government has no objection to the adoption at stations in charge of the Public Works Department of the procedure suggested by His Excellency the Commander-in-Chief.

2. The submission of detailed lists of minor works may be discontinued, but a lump sum provision should be made for the purpose in the schedule of requirements.

3. The Examiner of Public Works Accounts will frame the necessary Standing Orders in accordance with the Quartermaster-General's circular.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
To the Examiner, Public Works Accounts.
„ Military Department.

MILITARY WORKS.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 14th

Recd. *Encl.*

G.O., 14th Mar. 1891, No. 751 W.

MARCH.

Schedules of Military Works Requirements

Orders on circular from the Quarter-master-General issuing instructions in connection with the preparation and submission of the — for inclusion in the Imperial Military Works budget estimate of the financial year 1892-93 and subsequent years.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

G.O., dated 8th November 1890, No. 721, Educational.

Read—the following letter from the Director of Public Instruction, dated Madras, 10th September 1890, No. 9294 :—

I have the honor to submit, for sanction of Government, plans and estimates forwarded by the Superintending Engineer, V Circle, for the additional accommodation required for the Teachers' college. The revised estimate for Rs. 16,052 provides for extending the building on the northern side so as to give six new class rooms and for surrounding the whole building by a Mangalore tiled verandah. The necessity for the extension has been pointed out by Mr. Grigg in para. 11 of his letter recorded in G.O., No. 21, dated 14th January 1890, Educational. The estimate for Rs. 3,000 provides for a permanent shed for the primary department of the college.

2. As the need for the additional accommodation is pressing, I beg to request, with reference to this office letter No. 6859, dated 5th July last, that the necessary funds may be allotted and that special arrangements be made for the execution of the work as rapidly as possible.

Order—dated 8th November 1890, No. 721, Educational.

Approved and transferred to the Public Works Department. It is presumed that the estimates for the house accommodation of the Principal and Vice-Principal will be submitted separately.

(True Extract.)

(Signed) A. BUTTERWORTH,
Acting Assistant Secretary.

From the Director of Public Instruction, dated 15th December 1890, No. 12900.
Endorsement thereon in the Educational Department, dated 23rd December 1890.
From the Director of Public Instruction, dated 16th January 1891, No. 414.
From the Superintending Engineer, V Circle, dated 20th January 1891, No. 23 W.

G.O., dated 4th March 1891, No. 187, Educational.

Read—memorandum from the Public Works Department, dated 7th January 1891, No. 79 C.

Read—the following letter from the Director of Public Instruction, dated Madras, 13th February 1891, No. 1457. :—

In returning the papers received with reference on current No. 7, dated 6th instant, I have the honor to state that four estimates noted below for improvements and extensions to the Teachers' college buildings were submitted to Government with this office letters Nos. 9294 and 12900, dated 10th September and 15th December 1890, respectively :—

	RS.		RS.
A	for 16,052	C	for 16,000
B	„ 3,000	D	„ 3,980

2. The estimate of Rs. 16,052 is simply a revision of the estimate of Rs. 14,160 sanctioned in G.Os., No. 354, Educational, dated 16th June 1888, and No. 2068 W., Public Works Department, dated 9th July 1888, chiefly intended for adaptation and improvement of the old school-house at Saidápet for the *normal department of the college*. It provided not only for some improvements of the old building, but also extension by construction of additional rooms on the southern side. A sum of Rs. 14,484 is reported to have already been spent in this connection and the work is, I believe, complete and the rooms have been occupied by the Principal. This revised estimate was sanctioned in G.O., No. 721, dated 8th November 1890. The revision of the estimate was not due to any request from the department but to increase in cost of work during actual construction [*vide* items (2) concrete work, (5) moulded brick-work, (14) roofing with Mangalore tiles, (18) teakwood work].

3. Here I beg to note that the estimate of Rs. 16,000 (item C referred to in the following paragraph) for the extension on the northern side was received in this office on the 22nd July 1890 and the revised estimate of Rs. 16,052 for improving the school-house, already referred to, on the 1st August 1890. The latter was regarded as a revised estimate of the former item and it was through this confusion that, with his letter of 10th September 1890, Dr. Duncan submitted to Government the revised estimate of Rs. 16,052 as the estimate for the northern extension (C). I was not aware of the error which he had inadvertently committed when submitting in December the estimate for the northern extension, Rs. 16,000 (C), which had thus been lying in my office from the 22nd July. I regret that I did not notice the mistake which had been made when submitting this estimate.

4. On the reorganization of the college in 1890 (*vide* G.O., No. 21, dated 14th January 1890, Educational), it was found necessary, as explained in para. 11 of my letter recorded therein, to provide (i) for additional accommodation for the increased number of normal students and for classes for science and special instruction for drawing, &c., and (ii) for houses for the Principal and Vice-Principal. A provision of Rs. 30,000 was made in the Provincial Civil Works budget for 1890-91 under part I, class B works, and, as the Government accepted the necessity for the additional accommodation, the Executive Engineer was requested in the beginning of 1890 to prepare estimates for the works concerned.

5. The estimate for Rs. 3,000 provides for a permanent shed in the compound of the college mainly intended for the primary school attached to the college. This estimate was also sanctioned in G.O., No. 721, dated 8th November 1890, Educational. Owing, however, to the establishment of the primary normal classes at Triplicane, there is no immediate necessity for the construction of this shed, and the sanction may lie over for the present; but I would observe that it will ultimately be desirable to establish a Kindergarten department at Saidápet, for which a separate room would be required and that this sanction would then be available. The matter, however, may be postponed until things are ripe for the establishment of such a class, more especially as it may be necessary to erect a shed for gymnastics and carpentry in connection with the primary schools, Triplicane.

6. Of the two estimates, viz., Rs. 16,000 and Rs. 3,980, submitted with this office letter No. 12900, dated 15th December 1890, the former (already referred to) provides for the extension of the building on the northern side by six class rooms and for surrounding them by a Mangalore tiled verandah. This estimate awaits the sanction of Government.

7. The estimate of Rs. 3,980 (originally Rs. 4,130) was prepared in 1889 before the reorganization scheme was sanctioned and was intended to provide sitting and drill accommodation for primary class and also to bring the old building architecturally into keeping with the southern extension then being constructed. I did not, however, submit it for sanction, as I thought it preferable, and less likely to lead to complications, to connect it with the northern extension, sanctioned in G.O., dated 14th January 1890. In May 1890, I requested the Executive Engineer to include this work among the new extensions, but, although he has shown the work in the plan relating to the northern extension, he has sent in again a separate estimate which also awaits the sanction of Government. The objects with which I had the estimate prepared still exist and the latter, the architectural unity of the building, makes it more necessary even than before, as, unless this work is carried out, the old building, standing unimproved between the two new extensions, will be extremely unsightly. Large verandahs, I need not add, are a great assistance in the movement of pupils from class to class, and, unless this verandah is provided, pupils passing from the northern to southern extension will have either to go into the open or pass through the small class rooms of the old building, causing disturbance and annoyance.

8. The estimates for the house accommodation for the Principal and Vice-Principal are under preparation and will be submitted as soon as they are ready.

9. Excluding the excess outlay on the work commenced in 1889, the total expenditure proposed is Rs. 22,980 only, made up of the following items:—

	RS.
Permanent shed	3,000
Northern extension for six class rooms	16,000
For enclosing the old building with a Mangalore tiled verandah, connecting in this way the northern and southern extensions ...	3,980
Total ...	22,980

The above sum or Rs. 19,980, excluding the shed estimate, is exclusive of the cost of house accommodation for the Principal and Vice-Principal.

10. In these circumstances I beg to request that the early sanction may be accorded for the estimates in question, so that the works may be commenced as early as practicable.

Order—dated 4th March 1891, No. 187, Educational.

The letter of the Director of Public Instruction will be communicated to the Public Works Department with reference to its memorandum, dated the 7th January 1891, No. 79 C.

2. The following estimates are approved:—

(i) The revised estimate, amounting to Rs. 16,052, for the completion of the southern extension;
(ii) The estimate for Rs. 16,000 on account of the extension on the northern side; and
(iii) The estimate for Rs. 3,980 for the improvement of the old block.

The plans and estimates will now be transferred to the Public Works Department.

(True Extract.)

(Signed) A. BUTTERWORTH,
Acting Under-Secretary.

ORDER—dated 16th March 1891, No. 762 W., Public Works.

The undermentioned estimates for additions and improvements to the Teachers' college at Saidápet, Madras, are sanctioned and classified as Provincial, Civil Buildings, Original Works:—

	RS.
(1) Adapting and improving the late Saidápet High school building to provide accommodation for the normal department of the Teachers' college, No. 111 W. of 1890-91	16,052
(2) Extending the northern side of the Teachers' college to provide six new class rooms, No. 112 W. of 1890-91	16,000
(3) Constructing a Mangalore tiled verandah round the Teachers' college building, No. 113 W. of 1890-91	3,980

2. The estimate of Rs. 16,052, No. (1) above, supersedes the estimate of Rs. 14,460 sanctioned in G.O., No. 2068 W., dated 9th July 1888. The outlay on the work up to 1889-90 amounted to Rs. 14,484 and a sum of Rs. 1,675 was provided in G.O., No. 1877 W., dated 10th July 1890, for expenditure during the current official year.

3. The Superintending Engineer, V Circle, will arrange for the immediate commencement of the other two works, sanctioned above, and apply for the requisite funds in 1891-92.

4. The estimate of Rs. 3,000 for the construction of a shed in the compound of the college, not required at present, will be returned to the Superintending Engineer.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, V Circle, with eleven enclosures.
„ Examiner, Public Works Accounts.
„ Educational Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 16th.

Recd. *Encl.*

G.O., 16th Mar. 1891, No. 762 W.

MARCH.

Teachers' College at Saidapet, Madras

Estimates for additions and improvements to the —, sanctioned with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following paper :—

From Lieut.-Colonel R. R. E. DRAKE-BROCKMAN, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated 25th February 1891, No. 101 W.

I have the honor to forward, for sanction of Government, a revised estimate, amounting to Rs. 47,700 or 10,800 less than the original one sanctioned in G.O. No. 3395 W. of 24th October 1888, for completing the Talavasal bridge across the Vasistanadi river at the 41st mile on the Salem-Cuddalore road, Atúr taluk, Salem district.

2. The large saving of Rs. 10,800 is the result of the revision of the original design in the iron superstructure and by substituting an iron instead of wooden floor, &c.

3. The particulars of the savings are appended below :—

		RS.
The difference between the revised and original estimates of the iron superstructure including the completed portion of the masonry works as per altered design—*vide* details in the accompanying comparative statement		14,199
Add—Contingencies and petty supervision		2,886
Total saving ...		17,085
	RS.	
Deduct—		
Items not provided in the original estimate, but found necessary during execution	2,080	
Extra conveyance charges of iron works from Salem Railway station to site	1,505	
The rate allowed, Rs. 200, for fixing and erecting the iron superstructure was insufficient and hence it has been raised to Rs. 500. Difference	2,700	
		6,285
Net saving ...		10,800

ORDER—dated 16th March 1891, No. 763 W., Public Works.

The revised estimate, amounting to Rs. 47,700, for completing the Talavasal bridge in the Salem district is sanctioned in supersession of the estimate of Rs. 58,500 sanctioned in G.O. No. 3395 W., dated 24th October 1888.

2. This sanction has been registered as Local No. 39 W. of 1890-91.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle, with two enclosures.
" Examiner, Public Works Accounts.
" Local and Municipal Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 16th.

Recd. *Encl.*

G.O., 16th Mar. 1891, No. 763 W.

MARCH.

Talavasal Bridge, Salem District

Revised estimate, amounting to Rupees 47,700, for completing the —, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following paper:—

G.O., dated 6th March 1891, No. 1524, Revenue.

Read—Endorsement of the Public Works Department, dated 17th January 1891, No. 290 C., referring, for favor of information, letter from the Consulting Architect to Government inquiring whether the construction of the additions to the Stamp office should be postponed.

Read—also the following Proceedings of the Board of Revenue (Land Revenue), dated 24th January 1891, Mis. No. 574, on the following:—

(1) Letter from the Acting Superintendent of Stamps, Madras, dated 7th January 1891, No. 10.

(2) Letter from the same officer to the Secretary to Government, Revenue Department (through the Board of Revenue, Land Revenue Department), dated 17th January 1891, No. 65.

(3) G.O., dated 16th January 1891, Mis. No. 336, Revenue.

Resolution—dated 24th January 1891, Mis. No. 574.

Submitted for the orders of Government.

2. The proposal to amalgamate the Madras office with the Bombay office has been abandoned—*vide* G.O., dated 16th January 1891, No. 336. The question raised by the Collector may, therefore, be discussed on its own merits.

3. The Board fully agrees with the Superintendent that it will be best to postpone the execution of the alteration and consider if a new building should not be erected in their stead.

4. The result of the alterations will probably be far from satisfactory and will certainly be costly, and, as the Superintendent points out, they may turn out to be quite insufficient.

5. The Board recommends, therefore, that Government order the postponement of the proposed alterations and authorize the Board to consider the matter afresh.

Order—dated 6th March 1891, No. 1524, Revenue.

The Government concurs in considering that it will be best to erect an entirely new building on the site of the existing office. G.O., No. 907, dated 13th November 1890, approving plan and estimate for making alterations to the existing building, will accordingly be cancelled.

2. Orders will issue in the Public Works Department for the preparation of the necessary plans and estimates for a new building.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

ORDER—dated 16th March 1891, No. 764 W., Public Works.

The sanction accorded in G.O., No. 3366 W., dated 17th December 1890, to an estimate of Rs. 34,011 for extending the Stamp and Stationery office, Madras, is hereby cancelled.

2. The Consulting Architect will, in communication with the Superintendent of Stamps and Stationery and the Board of Revenue, draw up a design and estimate for a new building on the site of the existing office.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Consulting Architect to Government, with seven enclosures.
" Revenue Department, with one enclosure.
Examiner, Public Works Accounts.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 16th.

Recd. *Encl.*

G.O., 16th Mar. 1891, No. 764 W.

MARCH.

Stamp and Stationery Office, Madras

Cancelling the sanction accorded for extending the —, and directing the Consulting Architect, in communication with the Superintendent of Stamps and Stationery and the Board of Revenue, to draw up a design and estimate for a new building on the site of the existing office.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers :—

From C. H. B. BURLTON, Esq., Executive Engineer, Chingleput Division, to the Superintending Engineer, V Circle, dated Chingleput, 3rd March 1891, No. 5211 A.

With reference to your No. 145 C.N., dated 16th February 1891, I have the honor to state that the two iron record-racks for record-room of the District Judge's Court at Chingleput have already been received from the Public Works Workshops, and if under the orders of Government, No. 386 W., dated 10th February 1891, they cannot be put up, I should be glad to be favored with your instructions as to their disposal. Pending receipt of your instruction, I have instructed the sub-divisional officer to defer work until further notice.

No. 107 W.

Forwarded to the Chief Engineer, Public Works Department, for instructions with reference to G.O. No. 386 W., dated 10th February 1891.

2. It is presumed that the racks had better be returned to the Public Works Stores.

(Signed) D. McN. CAMPBELL, Major, R.E.,
Superintending Engineer, V Circle.

9th March 1891.

From Lieutenant-Colonel R. R. E. DRAKE-BROCKMAN, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated 7th March 1891, No. 125-E.W.

With reference to G.O. No. 386 W. of 10th February 1891, I have the honor to state that the iron record-racks were fixed to the District Court at Coimbatore before the receipt of order under reference.

ORDER—dated 16th March 1891, No. 765 W., Public Works.

Communicated to the Judicial Department with reference to the orders in that department quoted in the margin. The iron record-racks obtained for the District Judge's Court at Chingleput, but not yet erected, will be returned to store.

G.O., No. 1755, dated 10th Dec. 1890.
„ „ 210, „ 2nd Feb. 1891.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle.
„ „ „ V. „
„ Judicial Department.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 16th.

Recd. *Encl.*

G.O., 16th Mar. 1891, No. 765 W.

MARCH.

Iron Record-racks

Reports regarding — for the District Courts of Chingleput and Coimbatore, communicated to the Judicial Department with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

Read—the following papers :—

From the Inspector-General of Military Works, to the Secretary to the Government of India, Military Department, dated Simla, 13th June 1890, No. 1848 B.

I have the honor to submit, for the orders of the Government of India, a copy of a letter No. 1903, dated 29th May 1890, from the Superintending Engineer, Madras Command Military Works, with enclosures, relative to a proposal to enlarge the Army Head-quarters offices at Ootacamund.

2. These offices are located in "Mountstuart," a building borne on the Provincial civil list of the Madras Government and kept in repair from Provincial funds. It appears from the correspondence that a rent charge for this building has been sanctioned by the Government of India.

3. The question for decision is whether the Government of India will permit the proposed expenditure of Rs. 3,700 on enlarging these premises to be debited to the Military Works grant. I am unable to advise on this point without more precise information regarding the conditions of occupation than is contained in the papers now forwarded.

4. I presume that even, if the enlargement is carried out at the expense of the Military Works Department, the repairs will continue to be chargeable to Provincial funds.

5. His Excellency the Commander-in-Chief in Madras presses for early execution of the work: the conditions of tenure of the "Mountstuart" buildings are doubtless fully known to the Government of India, who sanctioned the rent charge referred to, and I, therefore, refer the matter at once to save the delay of further correspondence with the Superintending Engineer.

Enclosure.

From the Superintending Engineer, Madras Command Military Works, to the Inspector-General of Military Works, dated 29th May 1890, No. 1903.

I am desired by His Excellency the Commander-in-Chief, Madras, to refer the following for the orders of the Government of India.

2. I am to enclose copies of orders by the Government of Madras, Nos. 423 W., dated 8th February 1890, and 1194 W., dated 22nd April 1890. From these Proceedings it will be seen that it is proposed to extend the Head-quarters offices at Mountstuart, Ootacamund, at a cost of Rs. 3,700 and that a suggestion is made by the Government of Madras that the extension should be executed from the Military Works grant.

3. The question which I am desired to refer is whether the cost of the extension should be borne by the Military Works grant as administered by the Inspector-General of Military Works, by the Public Works grant of Madras or by the "Army" grant, the Mountstuart building being classified as "Provincial civil."

4. I am to add that, if funds for the work can be appropriated by the Military Works Department, the Local Government will be asked to allow the work, which His Excellency the Commander-in-Chief considers very necessary and urgent, to be carried out by the Public Works Department at Ootacamund as we have no executive establishment nearer than Wellington.

From the Secretary to the Government of India, Military Department, to the Inspector-General of Military Works, dated 28th July 1890, No. 1837 M.W.

I am directed to acknowledge the receipt of your letter No. 1848 B., dated 13th June 1890, forwarding correspondence relative to a proposal to enlarge the Army Head-quarters offices at Ootacamund at an estimated cost of Rs. 3,700 and inquiring whether the Government of India will permit the proposed expenditure of Rs. 3,700 on the enlargement of these permises to be debited to the Military Works grant.

2. In reply, I am to say that it was never contemplated that this building should be other than Provincial civil and the Government of India fail to see that the extension of the agency of the Military Works Department to Madras has changed the condition of affairs. Under these circumstances, they regret their inability to sanction the execution of the proposed work as a charge against the Military Works grant.

No. 1921 M.W.

Copy of the above forwarded to the Secretary to the Government of Madras, Public Works Department, for the information of His Excellency the Governor in Council.

(By Order.)

SIMLA, 5th August 1890.

(Signed) S. GRANT, Major, R.E.,
Asst. Secy. to the Govt. of India.

From Colonel E. H. EYRE, Officiating Quartermaster-General, to the Secretary to Government, Military Department, dated Ootacamund, 13th August 1890, No. 197 M.W. (Buildings).

With advertence to order of Government, No. 3181, dated 9th May 1890, I am desired to forward, for the information of Government, letter No. 3755 of the 9th instant, with one enclosure, from the Superintending Engineer, Madras Command Military Works, by which it will be seen that the Government of India decline to sanction the execution of the proposed alterations so much needed to the Mountstuart main building as a charge against the Military Works grant on the grounds that the said building cannot be considered other than Provincial civil.

2. In order to render the building suitable in all respects for the accommodation of the establishments located therein and for providing the Adjutant-General with a larger room and greater privacy than is possible under existing arrangements, the Commander-in-Chief would strongly recommend the extension of the main building all along the front, instead of merely throwing out two bays on either side, which is provided for under the scheme already submitted to Government and referred to in the Proceedings of Government above quoted. This proposal would, I am to say, involve a considerable outlay. His Excellency would be glad to know, therefore, whether Government will be prepared to consider such a proposal, as, unless the Government is willing to sanction the provision of funds for these more extensive alterations and improvements, it seems useless to go to the length of asking for the preparation of the necessary plans and estimates.

3. In the event of Government being unwilling to consider the larger project, the Commander-in-Chief hopes that the necessary funds, viz., Rs. 3,700, may be provided at a very early date in order to carry out the smaller scheme without further delay.

ENCLOSURE.

From Lieutenant-Colonel W. P. TOMKINS, R.E., Superintending Engineer, Madras Command Military Works, to the Quartermaster-General, Madras Army, dated Ootacamund, 9th August 1890, No. 3755.

With reference to your No 729 B., dated 27th May 1890, I have the honor to forward, herewith, for information, a copy of a letter No. 2555 B., dated 2nd instant, just received from the Inspector-General of Military Works, communicating the orders of the Government of India relative to the question of the cost of extension of the Army Head-quarters offices at Mountstuart, Ootacamund, being borne by this department.

No. 5177, Military.

No. 423 W., dated 8th February 1890.
" 1194 W., " 22nd April 1890.

Transferred to the Public Works Department, for favor of disposal, with reference to the orders cited in the margin.

OOTACAMUND, 14th August 1890. (Signed) A. KENNEY-HERBERT, Brigdr.-Genl., Secretary to Government.

From Brigadier-General E. H. EYRE, Quartermaster-General, to the Secretary to Government, Military Department, dated Madras, 21st January 1891, No. 157 T. (Special and Miscellaneous).

In O.G., No. 1149 of the 14th February 1890 (Military Department), Government, in view of the rent charge sanctioned by the Government of India for the Mountstuart buildings, Ootacamund, used as Army Head-quarter offices, declined to sanction an estimate, amounting to Rs. 3,700, submitted by the Superintending Engineer, IV Circle, for enlarging certain rooms occupied by the Adjutant-General's and Quartermaster-General's offices or to incur any further outlay on the buildings from Provincial funds beyond the cost of ordinary repairs. This decision it afterwards confirmed (*vide* O G., No. 3181 of the 9th May 1890, Military Department) when passing orders on this office letter No. 248 (Barrack) of the 21st February 1890, in which the necessity for the improvements asked for was prominently brought to notice. In this latter order, the Government suggested that the proposed extension of these offices should be executed from the Military Works grant under the new organization; but this it has been found impossible to do, the buildings being classed as "Provincial civil." I am now desired by His Excellency the Commander-in-Chief to submit to Government the following statement, from a consideration of which he trusts it may be induced to modify its decision and to accord sanction to this very necessary extension of the main building being carried out at an early date.

2. The "Bombay Castle" property, since designated "Mountstuart," was purchased by Government from Provincial funds in 1883 at a cost of Rs. 83,276-11-6, a further sum of Rs. 4,534-11-6 being expended at the time of purchase for certain alterations and repairs, bringing the total cost of the property up to Rs. 87,811-7-0. The property consists of certain detached buildings occupied as Army Head-quarter offices and 23 acres, more or less, of land surrounding them. Of this land not more than 5 acres need be retained for military use, so that Government has at its disposal some 18 acres of land in the very centre of the station, on a portion of which it has already built or permitted to be built the "Breeks' Memorial school," while another considerable portion has been taken up for the construction of a new road.

3. The sale value of this land has been estimated by the Collector of the Nílgiris to be at present from Rs. 1,000 to Rs. 1,500 per acre, but there is little doubt that, on the extension of the Coonoor Ghât Railway into Ootacamund, the value of this land from its advantageous situation will be very greatly increased.

Taking it, however, at a value of only Rs. 1,500 per acre, it represents a sum of Rs. 27,000, which deducted from the amount paid for the whole property, leaves a sum of Rs. 60,811-7-0 as the price paid from Provincial funds for the buildings alone together with 5 acres of land.

4. Prior, however, to the permanent removal of the Army Head-quarter offices to Ootacamund, the office of the Surgeon-General with Government was located at Madras in a hired building at a monthly rent of Rs. 205, debited to Provincial funds under "24. Medical—Medical Establishments." Rent was thus paid up to July 1884, when the Surgeon-General's office was removed into a military building in the Fort, for which no rent has been charged, though, it is to be observed, all repairs to this building, averaging annually Rs 675, are carried out from the Military Repairs grant. By this location of the Surgeon-General's office in a public building an annual saving of Rs. 2,460 to Provincial funds has been effected or from July 1884 to 31st March 1890 a total saving of Rs. 14,145.

5. During the 5 years from 1884 to 1889 a sum of Rs. 28,039 has been expended from Provincial funds on repairs and alterations to these buildings, or on an average about Rs. 5,600 per annum, but the greater part of this heavy expenditure has been incurred solely on account of the state of disrepair of these buildings when taken over by the Government. If, therefore, the cost of these repairs be added to the price paid for the buildings, with 5 acres of land as shown in last part of para. 3, the total cost will amount to Rs. 88,850-7-0.

6. The Government of India has accepted an annual charge against the Military Department of Rs. 3,600 as rent for the above buildings and which rent has been paid since May 1883. This annual rent, together with the sum of Rs. 2,460, shown above as annually saved on the rent of the office of the Surgeon-General with Government, produces a sum of Rs. 6,060 annually to Provincial funds. In August 1884 the Government of India, in reply to an application from this Government, refused to make a special grant for the purpose of recouping Provincial funds for the outlay advanced to meet the purchase and repair of the "Mountstuart" property, and in October of the same year it was asked to reconsider this refusal, or as an alternative to sanction the payment of rent calculated at 6 per cent. on the outlay which had been incurred; but the sum of Rs. 6,060 credited annually to Provincial funds directly and indirectly on account of the "Mountstuart" property yields very nearly 7 per cent. (6·82) on the cost of the purchase and subsequent repairs to the Army Head-quarter offices. This Government is, therefore, actually receiving a higher rate of rent than it considered necessary to recoup itself for the expenditure it had incurred.

7. In conclusion His Excellency Sir Charles Arbuthnot desires again to bring to the notice of Government the absolute necessity of some improvements being effected in the room allotted to the Adjutant-General, which is totally unfit for occupation by an officer of his position. As already pointed out in this office letter No. 248 (Barrack) of the 21st February 1890, it is so small as not to admit of the ordinary complement of office furniture being placed in it or of a fire place being provided, while there is barely room to allow of a chair being offered to any officer desiring an interview with the Adjutant-General, to obtain which he must pass through a room filled with clerks, and, with the exception of this room, there is no place where officers wishing to see the Adjutant-General can await their turn for doing so.

8. In view of these facts, His Excellency the Commander-in-Chief trusts that Government will be pleased to rescind its decision conveyed in G.O., No. 1149 of the 14th February 1890, and that it will accord its sanction to the necessary expenditure for the requisite extension of the main building on the "Mountstuart" property, with a view to rendering it suitable for the requirements of the Military Department.

No. 524, Military.

Transferred to the Public Works Department, for favorable consideration, in continuation of Military Department endorsement No. 5177, dated 14th August 1890.

Fort St. George, 26th January 1891. (Signed) A. KENNEY-HERBERT, Brigdr.-Genl., Secretary to Government.

ORDER—dated 17th March 1891, No. 767 W., Public Works.

His Excellency the Governor in Council adheres to the decision given in G.O., No. 423 W., dated 8th February 1890, but observes that, if the Government of India will consent to pay a rent for the Mountstuart property in accordance with the sanctioned rules * for rents of Government buildings, this Government will provide from Provincial funds the necessary capital outlay for the extensions required.

* Para. 1041, Madras Public Works Code. Para. 28, chapter XI, volume I, Government of India Public Works Code.

2. The Government of India will be addressed accordingly.

(Here enter No. 768 W., dated 17th March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Military Department.
„ Superintending Engineer, IV Circle.
„ Examiner, Public Works Accounts.

BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Datea March, 17th.

Recd. *Encl.*

G.O., 17th Mar. 1891, No. 767 W.

MARCH.

Mountstuart Buildings, Ootacamund

Passing orders regarding the proposed extension of the —.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

Letter—from

Colonel J. PENNYCUICK, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

The SECRETARY to the GOVERNMENT of INDIA,
Military Department.

Sir,

With reference to your endorsement No. 1921 M.W., dated 5th August 1890, I am directed to forward a copy of the Proceedings of this Government, No. 767 W., dated 17th March 1891, containing further correspondence regarding the necessity for improvements to the Army Head-quarter offices at Ootacamund and to inquire whether, if this Government undertakes to provide from Provincial funds the necessary capital outlay for the extensions required, the Government of India will consent to pay rent for the property in accordance with the rules laid down in para. 28, chapter XI, volume I, Government of India Public Works Code. I am to state that, so long as the present inadequate rent of Rs. 300 per mensem is paid for the buildings from Imperial funds, this Government is not prepared to incur any further outlay on them from Provincial funds beyond the cost of ordinary repairs.

2. With regard to the arguments in the Quartermaster-General's letter No. 157 T., dated 21st January 1891, I am directed to say that the temporary occupancy of a military building in Fort St. George by the office of the Surgeon-General with the Government of Madras can have no bearing on the peculiar circumstances in which this Government was induced to lay out Provincial funds on the purchase of the Mountstuart buildings at Ootacamund in the expectation that the amount would be refunded by the Government of India. Interchanges of buildings for Civil and Military purposes are of frequent occurrence, and the office of the Surgeon-General has since been moved out of the Fort. As regards the land, the value of which His Excellency the Commander-in-Chief considers should be deducted from the capital cost of the property, I am to say that it consists of steep hillside which cannot be used for any purpose and is worthless to Provincial funds. The road on this land, which is made a ground of complaint, is a vast convenience to the Army Head-quarter offices, and the construction of a school-house on the small part of the land, which could be used, does not in any way prejudice them.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

Fort St. George,
17th March 1891.

BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 17*th*.

Recd. *Encl.*

17th Mar. 1891, No. 768 W.

MARCH.

**Mountstuart Buildings,
Ootacamund**

On the subject of the proposal for extending the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

From H. IRWIN, Esq., C.I.E., Consulting Architect to the Government of Madras, to the Chief Engineer, Public Works Department, dated Chepâk, 3rd March 1891, No. 3644.

In accordance with paragraph 2 of G.O., No. 351 W., dated the 7th February 1891, I have the honor to submit a plan and estimate, amounting to Rs. 1,016, for constructing a latrine for the use of the coachmen and horse-keepers near the new High Court stables.

ORDER—dated 17th March 1891, No. 769 W., Public Works.

The estimate, amounting to Rs. 1,016, for constructing a latrine for the use of coachmen and horse-keepers at the new Law Courts, Madras, is sanctioned as supplemental to the estimate sanctioned in G.O., No. 2489 W., dated 17th September 1890. The total estimate for the buildings will now stand at Rs. 9,97,069.

2. This sanction has been registered as Provincial No. 114 W. of 1890-91 and classified as Civil Buildings, Original Works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Consulting Architect to Government, with two enclosures.
„ Examiner, Public Works Accounts.
„ Judicial Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 17th.

Recd. *Encl.*

G.O., 17th Mar. 1891, No. 769 W.

MARCH.

Latrine

Estimate of Rs. 1,016 for constructing a — for the use of the coachmen and horse-keepers at the new Law Courts, Madras, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

Proceedings of the Board of Revenue (Separate Revenue), dated 19th February 1891, Mis. No. 509.

C. S. CROLE, ESQ., C.S.

Read—endorsement of Government, Revenue Department, dated 20th October 1890, No. 6399.

Read—also reference on the above, dated 23rd October 1890, referring to the Deputy Commissioner, Southern Division, for very early report, endorsement from Government on letter from the Superintending Engineer, VI Circle, regarding a proposal to convert the large room of the plunge-bath at the Artillery barracks at Trichinopoly into an office for the use of the Deputy Commissioner, Southern Division.

Read—also the following letter from W. O. HORNE, Esq., C.S., Acting Deputy Commissioner of Salt and Abkári Revenue, Southern Division, to the Secretary to the Commissioner of Salt, Abkári and Separate Revenue, dated Trichinopoly, 10th December 1890, No. 3699 :—

With reference to the Board's reference on its Government Register No. 922 of 1890, I have the honor to report that I have inspected the plunge-bath room at the Artillery barracks which the supervisor, South Trichinopoly, proposed may be converted into a suitable office. Accommodation has to be provided for the Deputy Commissioner, two inspectors, North and South Trichinopoly Circles, the three offices of these officers with their records and also for the tents of these officers. The plunge-bath room can at best be divided into three rooms which I consider is hardly sufficient even for one of these offices—the Deputy Commissioner's. I am therefore of opinion that it is utterly unsuitable and insufficient notwithstanding the improvements and alterations which the Public Works Department proposes to make at a cost of Rs. 3,000.

2. On the 29th ultimo the Superintending Engineer, VI Circle, communicated to me an order of Government passed in the Military Department with a list of buildings in the European Infantry lines available for transfer to the Civil department and inquired whether any of those buildings are required for the use of the Salt department. I had these buildings shown me by the supervisor, Public Works Department, Mr. E. Dady, and I consider that one wing of the bomb-proof Infantry barracks may be converted into suitable office rooms if fitted with partition walls between. In its present condition it is unfit for habitation owing to want of light and ventilation,

There is, however, ample accommodation. The Public Works Department officer tells me he can make the improvements and alterations and make it quite suitable for an office at no considerable cost. There are at present only two or three entrances; these and the number of windows will have to be increased so as to allow more light and air into the rooms. I have requested the Superintending Engineer to furnish me with a plan showing the improvements which he may consider necessary to effect and will submit it on receipt for the Board's approval.

Read—also memorandum from Government, Revenue Department, Madras, dated 6th February 1891, No. 20.

Resolution—dated 19th February 1891, Mis. No. 509.

Adverting to the first Government order read above, the Board begs to submit a copy of the report received from the Deputy Commissioner, Southern Division, from which it appears that the plunge-bath room referred to is not sufficient to accommodate the Deputy Commissioner's office, much less those of the Inspectors of North and South Trichinopoly Circles in addition. The three offices are now located in one building, for which Government pays Rs. 40 *per mensem* as rent.

2. The Superintending Engineer's letter, forwarded to the Board for report with the first Government order read above, will be submitted to Government on receipt from the Deputy Commissioner, Southern Division, who has been asked to return it.

(A true Copy and Extract.)

(Signed) W. S. MEYER,
Ag. Secretary.

No. 1583, Revenue.

Transferred to the Public Works Department, with reference to its endorsement, dated 11th October 1890, No. 4133 C.

(Signed) C. A. GALTON,
Secretary to Government.

FORT ST. GEORGE,
7th March 1891.

ORDER—dated 17th March 1891, No. 770 W., Public Works.

Communicated to the Superintending Engineer, VI Circle, with reference to his letter No. 759 T.C., dated 6th October 1890. It will be seen that the proposal to alter the plunge-bath room has not been approved. An estimate for adapting the wing of the bomb-proof barracks, referred to by the Deputy Commissioner, should be prepared.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, VI Circle.
" Revenue Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 17th.

Recd. *Encl.*

G.O., 17th Mar. 1891, No. 770 W.

MARCH.

Office for the Deputy Commissioner, Southern Division, Salt and Abkari Department

The Superintending Engineer, VI Circle, directed to prepare an estimate for adapting a wing of the bomb-proof Infantry barracks at Trichinopoly as an —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

Read—the following paper :—

G.O., dated 10th March 1891, No. 212 R., Financial.

Despatch from the Right Honorable the Secretary of State for India, dated 5th February 1891, No. 2, Financial (Stores).

With reference to the letters noted in the accompanying list, I have to inform Your Excellency that I have sanctioned compliance with the indents therewith forwarded.

Enclosure.

Letter from Secretary to Government of Madras in Public Works Department, No. 2599 W., dated 4th October 1890.

(Stores for *No.* 1 *Periyár* Division).

Letter from Secretary to Government of Madras in Public Works Department, No. 2768 W., dated 20th October 1890.

(Girders for *Connemara* Library and Victoria Institute).

Letter from Secretary to Government of Madras in Public Works Department, No. 2765 W., dated 20th October 1890.

(Stores for *New Law Courts*, Madras).

Letter from Secretary to Government of Madras in Public Works Department, No. 3005 W., dated 13th November 1890.

(Wire rope for *Periyár Project* works).

Order—dated 10th March 1891, No. 212 R., Financial.

Recorded.

(True Extract.)

(Signed) N. S. BRODIE,
Ag. Assistant Secretary.

Order—dated 17th March 1891, No. 771 W., Public Works.

Communicated to the officers concerned with reference to the undermentioned orders :—

G.O., No. 2598 W., dated 4th October 1890.
" " 2767 W., " 20th " "
" " 2764 W., " " " "
" " 3004 W., " 13th November 1890.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, V Circle.
" Consulting Architect to Government.
" Superintendent of Works, Periyár Project.
" Examiner, Public Works Accounts.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 17th.

Recd. *Encl.*

G.O., 17th Mar. 1891, No. 771 W.

MARCH.

Indents

Proceedings, Financial Department, recording despatch from the Secretary of State sanctioning compliance with certain —, communicated to officers concerned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following paper:—

From Major C. C. RAWSON, R.E., Executive Engineer, North Arcot Division, to the Superintending Engineer, IV Circle, dated North Arcot, 17th February 1891, No. 658 S.E.

With reference to your memo. No. 90-N.A. of 8th February, 1891, I have the honor to return the map duly corrected. It is impossible to give any boundary in the Wallajah taluk between Vellore and Ranipet sub-divisions. All tank restoration works are in Ranipet sub-division.

2. The confusion of the names of the sub-divisions is due to the fact that the late Superintending Engineer applied for an extra sub-division, to be called the Arni sub-division, quite regardless of the fact that the tank restoration work for which it was formed had nothing to do with Arni. The new sub-division should have been called Arkónam sub-division.

3. The North Arcot division had for years been divided into two sub-divisions, called Vellore and Ranipet, the Ranipet sub-division being what is now called the Arni sub-division. There is no place at Arni for the sub-divisional officer to live. Nearly the whole of the building in which you and Captain Bevan and other officers lived has been given up to the Local Board for use as a hospital, leaving only sufficient room for a rest-house.

4. When the Superintending Engineer obtained sanction for a new sub-division and insisted that it was to be called the Arni sub-division, there was nothing else to be done but to make the old Ranipet sub-division into the new Arni one (as it contained Arni) and to call the new sub-division head-quarters at Arkónam by the old name of Ranipet sub-division.

5. I consider that the whole arrangement of sub-divisions is wrong for this reason. The Vellore sub-division is nearly all north of the Pálár river, while its head-quarters, Vellore, is south of the river. The Ranipet sub-division is all south of the river, while its head-quarters, Ranipet, is on the north bank.

6. I would propose the following distribution of sub-division charges to be called Vellore, Ranipet and *Arkónam sub-division*:—

Vellore sub-division—Head-quarters, *Vellore*—to consist of everything south of the Pálár, *i.e.*, Pólúr, Wandiwash, Arcot and Vellore taluks and the anicut with the following subordinates:—

Pólúr and Wandiwash taluks—Overseer Panchapakesa Iyer as now.

Anicut and Pálár channels and project and last portion of Arcot—Supervisor Govinda Row.

West portion of Arcot taluk and Vellore taluk and Kuppam—Supervisor Mr. Willis; *Sub-divisional Officer, Mr. Handcock.*

Ranipet sub-division—Head-quarters, Ranipet—Sub-Conductor Ward.

Poiney anicut system and Pálár anicut channels north side of river—Overseer *Raghava* Iyengar or his successor.

Gudiyátam taluk (except Poiney system)—Chittoor and Palmanér taluks—*Mr. Trutwein.*

Arkónam sub-division—Head-quarters, Arkónam—Mr. J. Taylor, Sub-divisional officer. All tank restoration works—Overseers Singara Iyengar and S. Panchapakesa Iyer.

Chandragiri taluk—the new overseer, Ruthnam Mudaliar.

I think that this arrangement is much better than the old one and might be arranged to have effect after Mr. Ward has got in his plans, &c., for the Cheyár anicut channels, say, from 1st June.

No. 112-E.W.

Copy submitted to the Chief Engineer, Public Works Department, for favor of orders with an intimation that the undersigned has talked over the subject with the Executive Engineer and considers his proposals the best that can be made.

(Signed) R. R. E. DRAKE-BROCKMAN, Lt.-Col., R.E.,
28th February 1891. Superintending Engineer, IV Circle.

To the Chief Engineer for Irrigation, dated 7th March 1891, No. 1263.
From the „ „ „ 11th „ „ „ 77.

ORDER—dated 17th March 1891, No. 772 W., Public Works.

The re-arrangement of sub-divisions proposed by the Executive Engineer, North Arcot division, is sanctioned.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle, with map for correction and return.
„ Chief Engineer for Irrigation.
„ Examiner, Public Works Accounts.

GENERAL.
ESTABLISHMENT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 17th.

Recd. *Encl.*

G.O., 17th Mar. 1891, No. 772 W.

MARCH.

Sub-divisions

The re-arrangement of — proposed by the Executive Engineer, North Arcot division, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—again the following paper :—

G.O., dated 4th December 1890, No. 3211 W., Public Works.

Read—the following paper :—

G.O., dated 19th November 1890, Mis. No. 1735 M., Local and Municipal.

Read—the following letter from the Superintendent, Geological Survey of India, dated 21st October 1890, No. 1530 :—

I have the honor to acknowledge receipt of G.O., Mis. No. 1418 M., dated 24th September 1890 (inquiring as to the possible existence of water-bearing rocks near the town of Ongole), which having been addressed to me to Calcutta and redirected to Yercaud and again to Bangalore, only reached me at the latter place on the 15th instant.

2. Having referred to my maps and notes of that neighbourhood, I beg to inform you that water-bearing strata of moderate extent may quite well exist all round the town and at no great distance from it as will be seen in the map accompanying my memoir on "the Geology of the Eastern Coast," &c. (Vol. XVI, Memoirs of the Geological Survey of India). Ongole stands at the eastern extremity of a low plateau capped with lateritic gravel which pits out into the great plain of the coast alluvium under which the lateritic gravels dip and are lost to sight. At the western end (or base) of the promontory is exposed a tract formed of soft, shaley sandstones (of upper Gondwana age) which are overlaid eastward by the lateritic gravels and are in all probability continuous under them till within a short distance of the Ongole hill (a triple ridge of gneiss with associated magnetic iron beds) round which they must lap and then extend to an unknown distance under the alluvial plain.

3. The inference that the sandstones do so extend under the alluvium is a legitimate one based on the general behaviour of these rocks along the coast both north and south of Ongole. There is of course a bare possibility of their having been removed from this part of the coast by denudation prior to the deposition of the alluvium, but this I think is less probable than that they yet remain. The facts can only be tested by boring or sinking deep wells through the alluvial plain.

4. From the nature of these sandstones and their intercalated shales, they may well contain water in quantity large enough to yield a very important water-supply.

5. There is sufficient analogy in the geological position of Ongole to that of Pondicherry to suggest the advisability of searching for such water-bearing strata around the former place.

6. What exact spot to fix upon for such trial sinkings is quite problematic owing to the great development of cotton soil over the surrounding flat country by which all the older formations are more or less hidden. If no light on the nature of the sub-soil is obtainable from wells which may have been sunk since my examination in 1875-76, I should select the spot most favorable for distributary purposes in case of success in meeting with water. Such spot would probably lie some distance to the west or north-west of the town, say, from one to one and-a-half miles off.

Order—dated 19th November 1890, Mis. No. 1735 M., Local and Municipal.

The foregoing letter will be communicated to the Collector of Nellore, to the Municipal Council, Ongole, and to the Sanitary Engineer in continuation of G.O., dated 24th September 1890, No. 1418.

2. The Government will be prepared to consider an application to bore an experimental artesian well at Ongole on the conditions accepted in the case of Tuticorin and recorded in G.O., dated 26th April 1889, No. 463 M., if the Municipal Council agrees thereto.

3. The Public Works Department will be requested to report whether the plant which in G.O., dated 26th November 1889, No. 3350 W., Public Works, was ordered to be forwarded to Tuticorin could be made available for the boring at Ongole.

(True Extract.)

(Signed) A. G. CARDEW,
Under-Secretary.

Order—dated 4th December 1890, No. 3211 W., Public Works.

The plant recently in use at Tuticorin can be made available for transfer to Ongole.

2. The Superintending Engineer, VI Circle, will submit a list of the plant with remarks as to the condition of the component parts.

(True Extract.)

(Signed) W. L. C. BADDELEY, Major, R.E.,
Under-Secy. to Govt., P.W.D.

READ—also the following papers:—

From C. W. WOOD, Esq., Executive Engineer, Tinnevelly Division, to the Superintending Engineer, VI Circle, dated 21st December 1890, No. 2910.

With reference to your No 844 T.N., dated the 8th instant, on copy of G.O., No. 3211 W., dated the 4th idem, I have the honor to forward the list with present condition of tools, &c., connected with the artesian well boring at Tuticorin.

2. Mr. Declosets has left Tuticorin without drawing the tubes. The Sub-division officer has been asked to withdraw the tubes if possible.

No. 926 T.N.

Copy, together with copy of list, submitted to the Chief Engineer, Public Works Department, with reference to para. 2 of G.O., No. 3211 W., dated 4th December 1890.

6th January 1891.

(Signed) A. C. SMITH, Lieut.-Colonel, R.E.,
Superintending Engineer, VI Circle.

From M.R.Ry. V. ANANDA RAO PUNTULU, Garu, Row Sahib, Chairman, Municipal Council, Ongole, to the Chief Secretary to Government (through the Sub-Collector, Nellore district), dated 10th February 1891, No. 636.

With reference to para. 2 of G.O., Mis. No. 1735 M., dated 19th November 1890, I have the honor to forward herewith copy of Council's resolution No. 292, dated 7th February 1891, and to request that this may be taken as an application to Government to bore an experimental artesian well at Ongole on the conditions accepted in the case of Tuticorin and recorded in G.O., No. 463 M., dated 26th April 1889.

ENCLOSURE.

Extract from the Proceedings of the Municipal Council, Ongole, passed at a meeting held on 7th February 1891 at 8 A.M. in the Municipal office.

* * * * *

292. Read Proceedings of the Madras Government, Mis. No. 1735 M., dated 19th November 1890, on letter No. 1530, dated 21st October 1890, from the Superintendent, Geological Survey of India, stating that the Government will be prepared to consider an application to bore an experimental artesian well at Ongole on conditions accepted in case of Tuticorin and recorded in G O., No. 463 M., dated 26th April, 1889, and also Proceedings of the Madras Government, No. 3211 W., dated 4th December 1890, on the subject.

The Council resolved to accept the proposal made by Government in Government Order under reply with thanks and to bore an experimental artesian well in Ongole on the conditions accepted in the case of Tuticorin and recorded in G.O., No. 463 M., dated 26th April 1889.

* * * * *

(True Copy and Extract.)

ONGOLE,
7th February 1891.

(Signed) V. ANANDA RAO,
Chairman.

Endorsement by C. H. MOUNSEY, Esq., Sub-Collector, Nellore, dated 13th February 1891.

Forwarded with the remark that the last "and" in the resolution seems to have crept in by mistake. I and I think the other Commissioners understood the offer to be that Government would undertake the boring, not the Municipality.

Endorsement by the Collector of Nellore, dated 20th February 1891, No. 349-Eng.
Submitted to the Chief Secretary to Government, Local and Municipal Department.

No. 146.

Transferred to the Public Works Department.

FORT ST. GEORGE,
11th March 1891.

(Signed) N. S. BRODIE,
Ag. Assistant Secretary.

ORDER—dated 17th March 1891, No. 773 W., Public Works.

Communicated to the Superintending Engineer, II Circle, who will submit, as early as practicable, an estimate for boring an experimental artesian well at Ongole. The question of allotting funds for the work will be considered on receipt of the estimate.

2. The list of boring plant available at Tuticorin will be forwarded to the Superintending Engineer, II Circle, who will arrange with the Superintending Engineer, VI Circle, for the transfer of the articles to Ongole.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, II Circle, with list of tools and plant.
" Superintending Engineer, VI Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.
" Local and Municipal Department.
" Revenue Department.

GENERAL
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 17th.

Recd. *Encl.*

G.O., 17th Mar. 1891, No. 773 W.

MARCH.

Artesian well at Ongole

The Superintending Engineer, II Circle, directed to submit an estimate for boring an experimental — and to arrange with the Superintending Engineer, VI Circle, for the transfer to Ongole of the boring plant at Tuticorin.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Civil Works.
Account.

READ—the following papers :—

From C. H. B. BURLTON, Esq., Executive Engineer, Chingleput division, to the Superintending Engineer, V Circle, dated Chingleput, 19th February 1891, No. 5000.

With reference to your endorsement No. 151 C.N., dated 16th February 1891, I observe that by G.O., No. 114 I., dated 10th February 1891, Pullarambaukan tank has to be treated as a relief work; but to comply with this order, if payments have to be made daily, another overseer is necessary. I should, therefore, feel obliged for further orders.

No. 91 W.

Forwarded to the Chief Engineer, Public Works Department, with request that another extra overseer may be appointed to the Chingleput division. I cannot see why daily payments are necessary, and, if this system is to be enforced on all relief works, establishment will have to be much increased.

(Signed) D. McN. CAMPBELL, Major, R.E.,
Superintending Engineer, V Circle.

2nd March 1891.

From Major D. McN. CAMPBELL, R.E., Superintending Engineer, V Circle, to the Chief Engineer for Irrigation, dated Chepâk, 6th March 1891, No. 85 E.I.

With reference to your memo. No. 21 C.N., dated 4th instant, I have the honor to state that I was informed by the Sub-divisional officer, when inspecting relief works at Ponnéri, that the Revenue authorities wished payments to be made daily and that the Executive Engineer had given him orders accordingly. I have personally received no official orders.

No. 1335 C.

Referred to the Revenue Department for favor of very early information whether it is intended that daily payments should be made to laborers on works of the nature referred to.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Government, P.W.D.

10th March 1891.

No. 1702, Revenue.

Retransmitted to the Department of Public Works with the remark that orders have been issued in G.O., dated 9th instant, No. 175, directing that arrangements be

made for making payments " at frequent intervals " to laborers employed on works specially selected for relief purposes. It rests with the Collector to determine whether *daily* payments are required on any particular work.

FORT ST. GEORGE,
12th March 1891.

(Signed) C. A. GALTON,
Secretary to Government.

ORDER—dated 17th March 1891, No. 774 W., Public Works.

Communicated to Superintending Engineers concerned for information and guidance.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
To the Chief Engineer for Irrigation.

CIVIL WORKS.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 17th.

Recd. *Encl.*

G.O., 17th Mar. 1891, No. 774 W.

MARCH.

Payments to Famine Laborers

Directing that — should be made at frequent intervals and daily payments only when desired by the Collector.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads,
Civil Works.

Read—the following paper :—

G.O., dated 16th March 1891, No. 200, Revenue.

Read—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 6th March 1891, No. 118 :—

Mr. Clogstoun.

Read—again Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 4th February 1891, No. 56.

Abstract.—Submitting to Government, with Board's remarks, special report from the Collector of Cuddapah on the state and prospects of the season in the district.

Read—also the following letter from E. J. SEWELL, Esq., Acting Collector of Cuddapah, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated Cuddapah, 1st March 1891, Ref. on Current No. 196-Ver. :—

With reference to paragraph 9 of Board's Proceedings, No. 56, dated 4th February 1891, I have the honor to submit that the Chief Engineer, South Indian Railway, reports that there is a large amount of earth-work and ballast still to be done on the railway between Váyalpád and Mudegubba, *i.e.*, nearly along the whole line and within the three taluks of Váyalpád, Madanapalle and Kadiri. This will find work for a large number of unskilled laborers.

2. The Sub-Collector, through whose division the railway runs, has been informed of this and requested to direct the Tahsildars of Váyalpád, Madanapalle and Kadiri to take active steps to publish in the villages of their taluks that labor is available on the railway line and to direct the heads of villages to inform the laboring classes of the same.

Resolution—dated 6th March 1891, No. 118.

Submitted, for the information of Government, with reference to the Proceedings quoted by the Collector.

(A true Copy and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

Read—also the following letter from the Collector of Cuddapah, dated 9th March 1891, Ref. on Current No. 196-Ver :—

With reference to G.O., No. 112, Revenue, dated 16th February 1891, para. 1, I have the honor to submit a copy of a letter from the Executive Engineer forwarding a list of works available or likely to be available for the employment of laborers.

2. From this list it will be seen that the department have but few sanctioned works on hand in the affected taluks. The amounts are a little over—

Rs. 5,000 in Pullampet.	Nothing in Ráyachóti.
„ 3,250 in Madanapalle.	Rs. 560 in Badvél.
„ 2,680 in Váyalpád.	„ 370 in Sidhout.
Nothing in Kadiri.	

3. On the other hand, the estimates awaiting sanction amount to nearly Rs. 9,000 in Pullampet, Rs. 5,200 in Madanapalle, Rs. 5,090 in Váyalpád. It is desirable that these estimates should, if possible, be at once sanctioned.

4. It will be observed also that there are estimates for considerable sums under preparation, particularly in Ráyachóti and Badvél, where there are no other works available.

5. The Executive Engineer tells me that his staff is too weak to enable him to complete and submit these estimates at once. The Superintending Engineer Colonel Smalley has often said the same thing when I have called on him for professional assistance in connection with minor irrigation works information called for by the Board, &c.

6. It would seem desirable, therefore, that some additional help in the shape of overseers and draftsmen should be given to the Executive Engineer to enable him to complete and submit the estimates he has under preparation.

7. I may note that the one estimate entered as being with me has been countersigned and returned.

8. The places, where there is least work available, are Ráyachóti, Kadiri, Sidhout and Badvél and of these Ráyachóti and Badvél are those where it is most wanted. In these two taluks the want will be met to some extent if the estimates under preparation can be rapidly completed and sanctioned.

9. I beg to submit copy of a letter received from the Chief Engineer, South Indian Railway, from which it will be seen that there is much more work suited for unskilled labor available on the Villupuram-Guntakal Railway than I had supposed. It seems to me that at present no more work is wanted in the sub-division with the possible exception of the Ráyachóti taluk. It would be well, however, to have all the estimates possible got ready in case of need.

10. At present the only action I have taken on the Chief Engineer's letter is to have notices widely published that there is plenty of work to be had on the Villupuram-Guntakal Railway. It will, no doubt, be necessary to arrange in the course of some weeks that heads of villages shall be authorised to give all destitute persons wanting work tickets. Certain centre on the railway should be fixed for the presentation of these tickets. Any one showing a ticket should be entitled to employment, and, if not able to do full work, should, if possible, be employed on task work. In any case he should not be turned off except in communication with the Revenue officers.

11. If these general lines are approved I will communicate with the Chief Engineer. At present there would be no one to send.

ENCLOSURES.

From M.R.Ry. S. SUBRAYACHARRIAR, Avergal, B.C.E., Rai Bahadur, Executive Engineer, Cuddapah division, to the Collector of Cuddapah, dated Cuddapah, 5th March 1891, No. 667.

In reply to your No. 196, dated 24th ultimo, regarding Imperial "irrigation works" in progress and likely to be sanctioned for immediate execution, I have the honor to forward the accompanying list of such works for your information and further instructions in the matter. Therein I have not included works that may be estimated for hereafter during the course of coming official year.

2. In Pulivendla only one tank and three channels are classed as "Imperial" and as these do not demand any immediate attention and as my establishment is limited we are not now working there, and hence no estimate either prepared or in hand. In Ráyachóti only three tanks are classed as "Imperial" and these all have been repaired, but there is an estimate in hand and under revision for improving the Hastanapuram tank for raising its capacity, and this estimate I have included in the list. In Sidhout all the important works have been lately repaired and completed. Two more estimates will be prepared, but, as they will be later in the year, I have not included them.

3. If any labor be available your Tahsildars may be instructed to send them to my subordinates for work under ordinary rules.

CUDDAPAH DIVISION.

LIST of Imperial irrigation works in progress and likely to be sanctioned for immediate execution.

Taluk.	Name of work.	Amount or balance of estimate.	Remarks.
		RS.	
Pullampet	Nagaripad tank—		
	Extending tank weir 70 feet ...	515	Incomplete work.
	Constructing channel weir 76 feet.	885	Do.
	Bommavaram channel—		
	Constructing a regulating dam and sluice to Ramalammalu channel.	780	Do.
	Orampaud tank—		
	Repairs to Pondalur river channel.	1,003	Do.
	New stone apron and revetment of the —.	270	Just sanctioned.
	Pondalur river channel, closing breaches and clearing prickly-pear of —.	610	Do.
	Kommore and Konapur tank—		
	Improving the —	11,050	Estimate returned for revision.
	Poli tank repairs	3,050	Do. do.
	Nagaripad anicut—		
	Repairing the —	8,800	Awaits sanction.
	Hastavaram tank—		
	Repairs	200	Just sanctioned.
	Mandapally embankment—		
	Repairing and closing breaches in the —.	1,150	Do.
	Total ...	28,313	
Madanapalle	Kandukúr Vyasasamudrum tank—		
	Constructing a new low level sluice to west surplus weir of —.	2,430	Just sanctioned.
	Repairing the east or large surplus weir of —	820	Do.
	Chinnattippasamudram tank—		
	Repairing the bund of — ...	470	Estimate awaits sanction.
	Extending weir	1,000	Do. do.
	Panchalamarri tank—		
	Repairs and improvements to —.	2,570	Do. do.
	Pooliyal tank—		
	Improvement to the —	4,000	Estimate under preparation.
	Nimmanapally Komara Obalanayani tank—		
	Repairs and improvements ...	1,160	Estimate awaits sanction.
	Total ...	12,450	
Váyalpád	Gutical large tank —		
	Repairing the bund of the — ...	670	Just sanctioned.
	Constructing weirs to —	2,010	Do.
	Tarizonda Ramanayani tank—		
	Repairs and improvements to —.	1,270	The estimate not yet returned by the Collector (*since returned*).
	Podamalamma tank—		
	Repairing and improving the — ...	3,820	Awaits sanction.
	Total ...	7,770	
Ráyachóti	Improving the Hastanapuram tank ...	6,000	Estimate under preparation.
	Total ...	6,000	

List of Imperial irrigation works in progress and likely to be sanctioned, &c.—*cont.*

Taluk.	Name of work.	Amount or balance of estimate.	Remarks.
		RS.	
Pulivendla ...	*Nil.*		
Badvél ...	Kalasapad-Rajapaliem Ráyacheruvu—Extension of weir to —	1,000	Incomplete work.
	Rangasamudram tank—Repairs	380	Just sanctioned.
	Kalasapad Chinnacheruvu—Repairing the —	1,000	Estimate under preparation.
	Chennampully tank—Reconstructing a sluice to — ...	180	Just sanctioned.
	Porumamilla tank—General repairs	5,000	Under preparation.
	Total ...	7,560	
Sidhout	Wontimitta tank—Repairing the sluice of the — ...	370	Sanctioned.
Cuddapah ...	Repairing the head sluice and anicut to Dongal cheruvu tank.	190	Do.
	Komalapuram tank—Repair	3,000	Under preparation.
	Ambavaram tank—Repair	3,000	Do.
	Total ...	6,190	

Order—dated 16th March 1891, No. 200, Revenue.

Orders will at once issue in the Department of Public Works for the speedy preparation of estimates for all the works entered in the Executive Engineer's list, the necessary additional staff being provided for the purpose and for the sanction of the estimates which are ready.

2. It will also be considered in the Department of Public Works whether any more works can be made available in the taluks of Ráyachóti, Kadiri, Sidhout and Badvél.

3. In taluks in which the work available on major irrigation works and the railway is likely to prove insufficient, minor irrigation works and Local Fund works must be provided and the Collector should at once draw up a programme and get estimates ready without loss of time.

4. The proposal in para. 10 is approved.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

ORDER—dated 18th March 1891, No. 785 W., Public Works.

Communicated in continuation of G.O., No. 502 W., dated 20th February 1891, to the Superintending Engineer, III Circle, who will, with the least possible delay,

submit, for sanction, the estimates referred to in para. 1 of the Government order read above and report what additional staff is needed in the Cuddapah division.

2. The Chief Engineer for Irrigation will report on the subject of para. 2.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, III Circle.
" Chief Engineer for Irrigation.
" Consulting Engineer for Railways.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 18th.

Recd. *Encl.*

G.O., 18th Mar. 1891, No. 785 W.

MARCH.

Relief Works in the Cuddapah District

Proceedings, Revenue Department, directing the speedy preparation of estimates for certain —, communicated to the Superintending Engineer, III Circle, and to the Chief Engineer for Irrigation.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

G.O., dated 14th March 1891, No. 197, Revenue.

Order—dated 14th March 1891, No. 197, Revenue.

Miscellaneous.

In its orders on the reports regarding the condition of the districts which have suffered from drought, the Government has impressed upon Collectors the necessity for at once preparing programmes of works for all the affected tracts, and has directed that selections should be made from the lists of irrigation works, both major and minor, in communication with the Public Works Department, and that estimates should be got ready for the works selected so that there may be no delay in starting them when necessary. The Commissioner of Revenue Settlement, Land Records and Agriculture is requested to call upon the Collectors of the districts concerned to submit their programmes at once and to see that estimates for the works selected are got ready without delay.

2. Where the irrigation works available in any affected tract are insufficient to meet all the demand for employment likely to arise therein, they should be supplemented by a sufficient number of suitable Local Fund works.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

ORDER—dated 19th March 1891, No. 795 W., Public Works.

Communicated to officers concerned for information and guidance.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
To the Chief Engineer for Irrigation.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 19th.

Recd. *Encl.*

G.O., 19th Mar. 1891, No. 795 W.

MARCH.

Famine Relief Works

Proceedings, Revenue Department, requesting the Commissioner of Revenue Settlement, Land Records and Agriculture to call upon the Collectors of the districts which have suffered from drought to submit their programme of — and to get ready the estimates for such works and directing to supplement irrigation works found insufficient in the affected districts by Local Fund works, communicated to officers concerned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From H. IRWIN, Esq., C.I.E., Consulting Architect to Government, to the Chief Engineer, Public Works Department, dated Chepâk, 3rd July 1890, No. 1068.

With reference to your memo. No. 3609 C., dated the 12th August 1889, I have the honor to submit, for approval, plans and estimate for wooden record-racks.

2. The rough sketch and estimate with Deputy Chief Engineer's note received with the memorandum under reply are herewith returned.

From the Superintending Engineer, II Circle, dated 18th February 1891, No. 2929 K.S.

From the Consulting Architect to Government, dated 26th February 1891, No. 3587.

From H. IRWIN, Esq., C.I.E., Consulting Architect to Government, to the Chief Engineer, Public Works Department, dated Chepâk, 5th March 1891, No. 3673.

In continuation of this office letter No. 3587, dated the 26th February 1891, I have the honor to submit a drawing of a portable ladder which can be easily carried by one person. The cost of such a ladder is Rs. 16. A ladder of this description, but somewhat higher, is in use at this office.

ORDER—dated 19th March 1891, No. 802 W., Public Works.

The type plan of wooden record-racks and step ladder for taluk offices, submitted by the Consulting Architect, is approved, and copies of the plan, specification and estimate will be circulated to officers and departments concerned for information and guidance with reference to G.O., No. 2032 W., dated 29th July 1889.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
„ the Consulting Architect to Government.
„ the Revenue Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 19th.

Recd.

G.O., 19th Mar. 1891, No. 802 W.

MARCH.

Wooden Record-racks

The type plan of — and step ladder for taluk offices, approved and ordered to be circulated to officers and departments concerned.

Accompaniment to G.O., No. 802 *W., dated* 19*th March* 1891.

Specification to accompany the type plan and estimate for wooden record racks for taluk offices, prepared in accordance with the Deputy Chief Engineer's endorsement No. 3609 C., dated 12th August 1889, on G.O., No. 2032 W., dated 29th July 1889.

The following are the sizes of the racks :—

6′ 0″ × 2′ 6″ × 9′ 11.″
12′ 0″ × 1′ 3″ × 12′ 3.″
6′ 0″ × 1′ 3″ × 12′ 3.″

The uprights for the 1′ 3″ or narrow racks to be $2\frac{1}{2}$″ square and 3″ square for the 2′ 6″ racks. The horizontal bars and framing for the former being $1\frac{3}{4}$″ × 3″ and 2″ × 3″ for the latter, they will be tenoned into mortises in the uprights and secured by treenails; before being put together the mortise and tenon to be coated with white-lead. The shelves will consist of battens 3″ × 1″ movable or secured at the ends with screws, if preferable.

The narrow or 1′ 3″ racks will be placed against the wall and secured to it by $\frac{3}{4}$″ iron bolts passing through the wall with head outside over 4″ × 4″ × $\frac{1}{8}$″ thick washers; the bolts passing through the rack will be secured by hexagon nuts over 2″ × 2″ × $\frac{1}{8}$″ washers; the ironwork to be painted with one coat red-lead before fixing.

The racks to be made of well-seasoned Burma teakwood, free from all defects, wrought, clean and framed in a workmanlike manner, and stained with two coats wood-oil after the work has been inspected and passed by the Executive Engineer in charge of the work.

(Signed) H. IRWIN,
Consulting Architect to Government.

Enclosures.

Estimate form—Detail measurements.

Detail of work.	Number.	Measurements in feet. Length.		Breadth		Depth.		Area or contents.			Total quantity of each description of work.
1	2	3		4		5		6			7
Record racks, measuring 6′ × $2\frac{1}{2}$′ × $9\frac{11}{12}$.′											
Teakwood—											
Uprights	6	9	11	0	3	0	3	3	8	7	
Horizontal pieces	28	2	$10\frac{1}{2}$	0	2	0	3	3	4	3	
End and cross pieces	21	2	3	0	2	0	3	1	11	7	
Horizontal pieces for shelves ...	42	2	$10\frac{1}{2}$	0	3	0	1	2	6	2	
Total cubic feet ...	...	...		...		...		...			11 6 7
Wood-oiling—											
Racks	6	10	0	...		1	0	60	0	0	
	28	2	9	...		0	10	64	0	0	
	21	2	0	...		0	10	35	0	0	
	42	2	9	...		0	8	77	0	0	
Total squares ...	...	...		...		...		...			2·36

Detail of work.	Number.	Measurements in feet. Length.	Breadth.	Depth.	Area or contents.	Total quantity of each description of work.
1	2	3	4	5	6	7
Record racks, measuring 12′ × 1¼′ × 12¼′.						
Teakwood—						
Uprights	6	12 3	0 2½	0 2½	3 2 3	
Horizontal pieces	32	5 10½	0 1¾	0 3	6 10 3	
End and cross pieces	40	1 0	0 1¾	0 3	1 5 6	
Horizontal pieces for shelves ..	64	2 11½	0 3	0 1	3 11 0	
Total cubic feet ...	...	...	...	...	...	15 5 0
Wrought iron—						
Bolts ¾″ diameter	8	3 6	1·476	...	41·32	
Hexagon head and nuts for bolts.	8	·43	lb. each.	...	3·44	
Washers, 2″ × 2″ × ⅛″	8	·138	do.	...	1·10	
Do. 4″ × 4″ × ⅛″	8	·55	do.	...	4·40	
Total lb. ...	...	...	...	...	...	50·26
Drilling holes in the wall for fixing bolts	8	...	...	...	8	8
Wood-oiling—						
Rack	6	12 3	...	0 10	61	
	32	5 9	...	0 9½	146	
	40	0 10	...	0 9½	26	
	32	5 9	...	0 8	123	
Total squares ...	...	...	...	...	...	3·56
Record racks, measuring 6′ × 1¼′ × 12¼′.						
Teakwood—						
Uprights	6	12 3	0 2½	0 2½	3 2 3	
Horizontal pieces	32	2 10½	0 1¾	0 3	3 4 3	
End and cross pieces	24	1 0	0 1¾	0 3	0 10 6	
Horizontal pieces for shelves ...	32	2 10½	0 3	0 1	1 11 0	
Total cubic feet ...	...	...	...	...	...	9 4 0
Wrought iron—						
Bolts ¾″ diameter	4	3 6	1·476	...	20·66	
Hexagon head and nuts for bolts.	4	·43	lb. each.	...	1·72	
Washers, 2″ × 2″ × ⅛″	4	·138	do.	...	·55	
Do. back of wall, 4″ × 4″ × ⅛″	4	·55	do.	...	2·20	
Total lb. ...	...	...	...	...	...	25·13
Drilling holes in the wall for fixing bolts	4	...	...	...	4	4
Wood-oiling—						
Rack	6	12 3	...	0 10	61 0	
	32	2 9	...	0 9½	70 0	
	24	0 10	...	0 9½	16 0	
	32	2 9	...	0 8	59 0	
Total squares ...	...	...	...	...	...	2·06

ESTIMATE form—Abstract.

Quantity.	Description of work.	Rate.	Per	Amount.	Total.
1	2	3	4	5	6
	Record racks, measuring 6 × 2¼ × 9½ *feet.*	RS.		RS.	RS.
11 6 7	Teakwood, wrought and put up	4 0 0	c. foot.	46	
2·36	Wood-oiling, three coats	1 2 0	square.	3	
	Contingencies at 5 per cent.	...	...	2	
	Petty supervision at 2½ per cent.	...	...	1	
	Total ...	...	...	...	52
	Record racks, measuring 12 × 1¼ × 12¼ *feet.*				
15 5 0	Teakwood, wrought and put up	4 0 0	c. foot.	62	
50·26	Wrought-iron bolts for fastening racks to wall	0 3 0	lb.	9	
8	Drilling holes in the wall for fixing bolts ...	1 0 0	each	8	
3·56	Wood-oiling, three coats	1 2 0	square.	4	
	Contingencies at 5 per cent.	...	...	4	
	Petty supervision at 2½ per cent.	...	...	2	
	Total ...	...	...	...	89
	Record racks, measuring 6 × 1¼ × 12¼ *feet.*				
9 4 0	Teakwood, wrought and put up	4 0 0	c. foot.	37	
25·13	Wrought-iron bolts for fastening racks to wall	0 3 0	lb.	5	
4	Drilling holes in the wall for fixing bolts ...	1 0 0	each	4	
2·06	Wood-oiling, three coats	1 2 0	square.	2	
	Contingencies at 5 per cent.	...	...	2	
	Petty supervision at 2½ per cent.	...	...	1	
	Total ...	...	...	...	51
	Grand total of estimate ...	...	...	...	...

NOTE.—The cost of a ladder in accordance with the type design will be approximately Rs. 16.

MADRAS,
3rd July 1890.

(Signed) H. IRWIN,
Consulting Architect to Government.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

Read—the following papers :—

G.O., dated 20th February 1891, No. 1222, Revenue.

Read—the following letter from the Superintendent of Madras Survey, dated 16th February 1891, No. 30-G. :—

[*Reference.*—G.O., dated 22nd January 1891, No. 516, regarding maps to the Surveyor-General with information about Public Works Department's canals and roads.]

I have the honor to report that the taluk maps, scale 1″ = 1 mile, show canals and roads as they existed at the time of survey. These maps could easily be corrected up to date by the Public Works Department or Local Fund Engineers and supplied to the Surveyor-General when required.

2. The enclosures received with the Government order under reply are returned.

Order—dated 20th February 1891, No. 1222, Revenue.

Communicated to the Public Works Department with reference to G.O., No. 110 W., dated 14th January 1891.

(True Extract.)

(Signed) R. C. C. CARR,
Ag. Under-Secy. to Government.

Enclosure.

G.O., dated 22nd January 1891, No. 516, Revenue.

Read—Proceedings of the Public Works Department, dated 14th January 1891, No. 110 W., communicating to certain authorities letter from the Government of India for expression of the opinion asked for in para. 1 regarding the exact location of various public works and for reply to the question in para. 2 as to maps which accurately show the canals and roads in the Madras Presidency.

Order—dated 22nd January 1891, No. 516, Revenue.

Referred to the Superintendent of Revenue Survey for early report.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

No. 8 W.

Note by the Chief Engineer for Irrigation.

There are not in this department any accurate maps on a large scale showing the exact location of all the various irrigation works as executed, but for most of those more recently carried out, say during the past twenty years, there are surveys

on varying scales showing the alignment which the various canals and channels were designed to have. This alignment has doubtless in some places been altered during construction.

2. There are, however, for all the more important irrigation systems "sketch maps," a list of which is given in the margin. These maps may be taken as denoting the location of the various channels sufficiently accurately for any map whose scale does not exceed 1″ = 2 miles. A sample map is forwarded for reference and the others can be supplied if required.

		SCALE.
1.	Map of Ganjam-Gopálpur and Chilka lake canals	1″ = 4 miles
2.	Do. of Rushikulya and Mahánaddi canals	1″ = 4 ,,
3.	Maps showing canals in the Godávari delta in 3 sheets	1″ = 2 ,,
4.	Do. do. Kistna delta in 2 sheets	1″ = 2 ,,
5.	Map of Kurnool-Cuddapah canal	1″ = 4 ,,
6.	Do. of the Pennér northern delta	1″ = 1 mile
7.	Do. do. southern do.	½″ = 1 ,,
8.	Do. of Pálár anicut system, northern and southern sections, in 3 sheets	1″ = 1 ,,
9.	Do. of Bárúr tank project	1″ = 1 ,,
10.	Do. of Pelandorai anicut system	1″ = 1 ,,
11.	Do. of Cauvery delta	1″ = 8 miles
12.	Maps showing channels of Bhaváni and Amarávati rivers in 2 sheets	1″ = 4 ,,
13.	Map of Periyár pr ject	1″ = 6 ,,
14.	Do. Srivaikuntham anicut system	1″ = 2 ,,
15.	Do. Buckingham canal in 7 sheets	1″ = 2 ,,
16.	Do. West Coast canal in 6 sheets	1″ = 4 ,,

CHEPÂK,
6th March 1891.

(Signed) G. T. WALCH,
Chief Engineer for Irrigation.

To the Secretary to Government,
Public Works Department.

ORDER—dated 19th March 1891, No. 805 W., Public Works.

Ordered that the Government of India be addressed.

(Here enter No. 806 W., dated 19th March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation.
,, Consulting Engineer for Railways.
,, Local and Municipal Department.
,, Revenue Department.

GENERAL.
ESTABLISHMENT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 19th.

Recd. *Encl.*

G.O., 19th Mar. 1891, No. 805 W.

MARCH.

Location of various Public Works

Ordered that the Government of India be addressed on the subject of the best means of obtaining reliable information as to the —,

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

LETTER—from

COLONEL J. PENNYCUICK, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

SIR,

I am now directed to reply to your letter No. 3551 G., dated 23rd December 1890, on the subject of the best means of obtaining reliable information as to the exact location of various public works. The works particularly mentioned are (1) railway works, (2) canals, (3) roads.

2. As regards (1) the existing arrangement under which the Railway Department send their original index plans to the Survey office, Calcutta, where the alignments are entered on the maps by surveyors accustomed to such work, is stated to work well, and no change is apparently desired. It thus remains to consider the best means for obtaining accurate information under (2) and (3).

3. In respect to (2), the Chief Engineer for Irrigation reports that there are not in his department any accurate maps on a large scale showing the exact location of all the various irrigation works constructed, but that, for most of these more recently carried out, say during the past twenty years, there are surveys on varying scales showing the alignment which the canals and channels were designed to have. This alignment has doubtless in some places been altered during construction. But for all the more important irrigation systems there are "sketch maps" which may be accepted as sufficiently accurate for transference of details to any map on a scale not exceeding 1″ = 2 miles. A sample map is forwarded herewith for reference, and the others can be supplied if required. The following is a list of the irrigation systems for which "sketch maps" are available :—

	SCALE.
1. Ganjam-Gopálpur and Chilka lake canals	1″ = 4 miles
2. Rushikulya and Mahánaddi canals	1″ = 4 „
3. Canals in the Godávari delta	1″ = 2 „
4. Do. in the Kistna delta	1″ = 2 „
5. Kurnool-Cuddapah canal	1″ = 4 „
6. Pennér northern delta	1″ = 1 mile
7. Do. southern delta	½″ = 1 „
8. Pálár anicut system, northern and southern sections ...	1″ = 1 „
9. Bárúr tank project	1″ = 1 „
10. Pelandorai anicut system	1″ = 1 „
11. Cauvery delta	1″ = 8 miles
12. Channels of Bhaváni and Amarávati rivers	1″ = 4 „
13. Periyár project	1″ = 6 „
14. Srívaikunthain anicut system	1″ = 2 „
15. Buckingham canal	1″ = 2 „
16. West Coast canal	1″ = 4 „

4. The taluk maps, scale 1″ = 1 mile, can be employed for information in regard to (3) roads. These maps show canals as well as roads as they existed at the time of survey, and His Excellency the Governor in Council believes that there will be no great difficulty in bringing them up to date by the agency at the disposal of the Public Works and Local Fund Engineering departments so as to meet the requirements of the Surveyor-General.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
19th March 1891.

GENERAL.
ESTABLISHMENT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 19th.

Recd. *Encl.*

19th Mar. 1891, No. 806 W.

MARCH.

Location of various Public Works

On the subject of the best means of obtaining reliable information as to the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

G.O., dated 17th March 1891, No. 212, Revenue.

Read—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 10th March 1891, No. 132 :—

MR. CLOGSTOUN.

Read—the following letter from J. H. A. TREMENHEERE, Esq., Acting Collector of the Chingleput District, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated Saidápet, 5th March 1891, Ref. on No. 698-Eng. :—

In continuation of my letter, No. 61-S.L.R., dated 25th ultimo, I have the honor to report further on the condition of the people in this district.

2. *Chingleput.*—On the 23rd February I went to Tirupórúr to inspect part of the affected villages in the Chingleput taluk. They are much scattered, including Vandalur and its immediate neighbourhood on the South Indian Railway; some villages round Covelong and down the coast as far as the Seven Pagodas, and thence west to Tirukalikundram; but within this area there are a number of villages which have had a tolerable or even a fairly good season. The villages I inspected were represented to me as the worst.

3. (*a*) In Tirupórúr itself I saw no sign of want of food. The laboring class had found work at the salt factory of Covelong and in clearing the Buckingham Canal.

(*b*) In Kannakampattu, just to the north, not a laborer was in the village, all being similarly employed.

(*c*) In Illalur (two miles north-west) I saw some fifty men, women and children of the ryot class. There was more poverty than I have hitherto seen in that class, but only four or five looked insufficiently nourished. They had some crops coming on under wells and in ordinary dry land, and were eager for advances to dig new wells. They can maintain themselves till April, when some minor irrigation works will be repaired in the neighbourhood.

In the *Paracheri* I saw about 100 pariahs, who were all in fair condition, and whose poverty was not so marked as is usual in the Chingleput taluk. This phenomenon I attribute to the fact that they had by some means obtained (from the Forest officer, if I remember rightly) a few acres of land which they had cultivated. They complained of shortness of work, but they would go neither to Covelong nor to the canal.

(*c*) Just west of Illalur is Kattur and by common consent there is no worse village. From a year back until November last, a good number of men of the ryot class had migrated to Madras or to places such as Pallal under the Red Hills tank, where their labor would be more profitable. Of the people who had remained in the village none presented an appearance of wanting food. In this opinion I was supported by the Sub-Collector, who had now joined me.

(*d*) Thence we went four miles south to Madayathur, where we saw some hundred ryots and fifty pariahs. We examined them as carefully as torch-light would permit, and questioned them closely as usual. Their condition was normal; but there is no doubt the pariahs are being put to it to find work. Very few, however, had gone elsewhere; and we had no doubt all could maintain themselves till April.

(*e*) On a third day we went south from Tiruporúr to Tandalam, Venganeri and Alattur. In each village the ryots have been hard hit, but can recover themselves if favorable seasons return. In Alattur is a large Paracheri, where the grinding poverty, characterestic of Chingleput, is of course no less distressing than ever; but neither, must it be added, is it more so. I must return to this subject later.

(*f*) In the evening we went to Kottamedu, six miles west of Tiruporúr. Here, too, the ryots had eased the pressure of their numbers by sending some of the younger members of the different families to Madras during the previous year, whence they would send or bring their savings. The pariahs complained of short work, but it had not yet shown any effects on them.

(*g*) The next day we went to Senneri, six miles westward, and, as usual, saw all the inhabitants. There were the usual number of aged and decrepit people, who were still being supported by charity, and the others looked as usual.

(*h*) To finish here with the ryots, they are mostly in fair case. They are to be divided into three classes; those holding land in absolute ownership, who are generally well enough to do; those holding land under a zemindar, shrotriemdar, or sole mirassidar, who are well-to-do if they have an unimpeached occupancy right, but not otherwise; and those holding no land of their own, but who each year rent lands of others for a money-rent or more frequently on the half-produce system. Generally, it is only the last class which has succumbed to the adverse season, and they must fall back, when they have no savings, into the class of laborers. There are two other points to be noticed, which act in opposite ways. The mirassi system, by keeping away stranger applicants for land and by inducing the ryots to hold more than they can properly cultivate, has riveted their attention to irrigable land and allowed a vast extent of uplands to lie waste and jungle-grown. When therefore there comes a season disastrous to the rice-crop, the population has no upland crop to take its chance with; and a very good chance it would have been this year, as experience elsewhere shows. As some compensation, these jungles give grazing at present to thousands of cattle, sheep and goats, the property of ryots of all classes, to some of whom they stand as a saving clause against ruin.

(*i*) To return to the pariahs we saw 60 or 70 at Senneri, whose condition, though none except habitual beggars were in present and actual want of food, would have moved a heart of stone. I have said above that their state is not appreciably lower than usual; a large proportion of them are always badly nourished, clad, if at all, in the vilest of rags, eaten up with leprosy or other horrible diseases, hutted like pigs, untaught, uncared for and unpitied. I must apologise to the Board and Government for picturing the position, which is indeed already known; but the day cannot be far distant when the public conscience of England, if not of India, will wake up to the condition of these unhappy wretches and to the easy means of ameliorating it.

4. Mr. Mullaly and I are both of opinion that, though the laboring classes in Chingleput may have to endure greater hardships than usual, yet they will be able in various ways to support themselves till April, when the effect of the loans for land improvement will be felt and the new scheme of minor irrigation works be put in hand.

I have to-day received the Board's order to start some minor irrigation works.

(Initialled) H. T.

5th March 1891.

5. *Madurántakam.*—On the second instant, I went to Acharavakkam, the affected part of the Madurántakam taluk. A map will show that the south-west corner of the taluk is marked off by the railway and the Wandiwash road; this very nearly agrees with the distressed portion, but is a little too narrow in its limits. The most affected villages being Vellamur (just north of the Wandiwash road), Oratti and Tinnalur (on the west and south-west). I inspected them and other villages on the 2nd and 3rd.

6 (*a*). At Vellamur I saw 60 ryots and 50 pariahs. All seemed in usual condition, and there has been agricultural labor so far. Two families of pallis and pariahs had gone away to Wandiwash and Uttramerur. The Munsif said work would last 10 more days, but I have no doubt the people can get on for another month.

(*b*) *Perumber-Kandigei.*—Condition usual, complaints and requests as usual, viz., for remission, repair of tank, &c.

(*c*) *Sirunper*, (*d*) *Chittámur*, (*e*) *Kilattipakkam*, (*f*) *Porakal.*—Condition usual, complaints and requests as usual, viz., for remission, repair of tank, &c.

(*g*) *Oratti.*—Out of 200 people (besides brahmans), only two boys very thin, and a woman who has been a widow 10 years and lives by sweeping houses; an ordinary average.

(*h*) *Chinnaneri.*—Condition of ryots good, that of pariahs as usual. The latter only ask for house-sites.

(*i*) *Tinnalur.*—The ryots are all right. The Pariahs numbered 50 females and 38 males. I extract from my notes.

Women.—" One little girl of 8 says she has *conjee* only once a day, but she afterwards changed the food to kuzu (mixture of *ragi* or cholam and rice). Another of 7 eats cholam-kuzu twice a day; and a boy of 6 the same. None of them look more out of condition than is common.

None of the 50 females look at all emaciated, but I have no doubt they are reducing their food.

Men.—Not noticeably out of condition, except one youngster of about 15 who looks very thin and says he gets a little *conjee* every second day when he takes grass to a ryot's calves; but 4 days ago he was picking ground-nuts. His master says he would feed him every day if he brought grass; he says himself he does not go every day as he feels lazy (probably the effect of illness).

The men ask for house-sites, but (being asked) say that labour is insufficient. They admit they have had work up to day.

All the big ryots admit that practically no one has left this part of the country for want of work, &c."

7. The Acharavakkam Munsif says " people will have work for 15 days and then can get on somehow with trouble till 15th April when it usually rains." The Tahsildar says " the worst tract can get on till 1st April without the least anxiety, when minor irrigation works will pull the people through for two months, April and May."

8. I agree with the Tahsildar, excepting the words " without the least anxiety." The Public Works Department have a number of estimates ready for this part of the country. It is distinctly not so bad as parts of Chingleput.

9. *Saidápet.*—Last week on the 28th February, I inspected what were reported to be the worst paracheries in the Saidápet taluk. I had been told that in Viragambakkam, many children were starving; and that in Koyambedu and Arambákkam there was much sickness and starvation amongst children. I saw every man, woman and child in the three paracheries and made careful inquiries, the results of which I copy from my notes and embody in an appendix, to which I beg a reference may be made. I found no present scarcity of work, nor will there be any so long as the grass lasts which is taken into Madras. I found also that the men were eating rice twice a day and rice mixed with ragi for the mid-day meal; and that nearly all the children had three meals a day, including one meal of rice. The physical condition of the people had not sunk below the average. The Deputy Collector is now touring in Saidápet, and I hope soon to have the results of his inspections.

10. *Tiruvallúr taluk.*—I enclose the Divisional officer's report. In the Northern or Kodúr tract, three Public Works Department works are in progress—at Kodúr Kambakkam and Pedda Ittivakkam; and with ordinary agricultural and minor irrigation work, afford sufficient employment.

In the Southern or Periapalayam tract, besides the minor irrigation works, ordinary agricultural operations and the digging of wells under Land Improvement loans now going on, it is desirable that more Public Works Department repairs should be started. I telegraphed to the Executive Engineer who replied as follows on the 2nd: " Uttakotei tank estimate not yet received. Contractors expected to-day to sign bonds for Kágavákkam and Kannipér works, estimates of which have been sent for execution." I hope soon to proceed again to this tank.

11. *Ponnéri taluk.*—Prospects remain unchanged, except that the ragi crop under wells is nearing harvest. I enclose a list showing the numbers on the Arni river diversion and on the embankment of the same river. The numbers fluctuated because of changes in the level of the cutting, which the laborers erroneously thought increased the task, and because the embankment, as it progresses, takes them to a greater distance from their homes. As I have already informed the Board, the Public Works Department have experienced difficulties in the matter of daily payments which have not been regularly made. As to any reduction in the rates, that must necessarily depend on the task, and it must be remembered that nearly all the laborers walk from and to their homes each day. Until I again inspect the taluk, I am not able to add anything material to the enclosed reports.

12. I append a statement of prices of food-grains for the week ending 28th February 1891:—

Taluks.	Rice, second sort Scarcity rate = 10.	Ragi, scarcity rate = 13.
Saidápet ...	12·08	21·92
Ponnéri ...	12·08	19·18
Tiruvallúr ...	10·57	21·92
Conjeeveram ...	12·15	22·23
Chingleput ...	12·25	19·87
Madurántakam ...	11·22	18·81

13. The Census work, which on the top of the inspection of withered crops has nearly broken the back of the Revenue Department, is now happily over; but we begin upon the jamabandi, under which I fear we shall break down unless some help be given. At present I must ask for another Deputy Collector to set free Mr. Ramachendraiyar for season inspection of the Ponnéri and Saidápet taluks. The latter is only a second-class Magistrate, so, much of his proper work goes to Mr. Pinto, who already has more than he can do. I want, therefore, a first-class Magistrate, and if Government cannot at once place its hands upon an officer, I would ask for Mr. Shanmugam Sundra Pillai, now or lately Tahsildar of Satyamangalam and Palladam in Coimbatore. Shortly I shall have to ask Government to relieve my Tahsildars of all magisterial work.

Resolution—dated 10th March 1891, No. 132.

In the above letter the Collector of Chingleput submits a further report on the condition of the people in the affected tracts based on the results of his personal observations and inquiries and those of his Divisional officers.

2. In the Sub-division, the only tracts which are seriously affected are portions of the Tirupórúr division of the Chingleput taluk and the Acharavakkam firka (range) of the Madurántakam taluk which adjoins the Wandiwash taluk of North Arcot. Both these tracts and some of the worst villages of the Saidápet taluk have been visited by Mr. Tremenheere and several hundreds of the poorer classes were carefully inspected by him. In many of the villages he found that there was "no present scarcity of work," and the condition of the people was on the whole fair, though there can be no doubt that several have begun to reduce their food. Both the Collector and the Sub-Collector consider that the laboring classes will be able to support themselves by various means till the 1st of April, when it is proposed to start minor irrigation and other works in the first two taluks mentioned above. The Board has already directed the Collector (Proceedings, dated 2nd March 1891, No. 114) to commence these works *at once* in the Chingleput taluk. Mr. Tremenheere is now requested to see that this is done both in the Tirupórúr and in the Acharavakkam firkas. There is no object in postponing the works for another three weeks, seeing that the laboring classes are admittedly enduring "greater hardships than usual," though they have not shown any visible signs of emaciation.

3. In two villages of the Chingleput taluk, Alathur and Senneri, a very sad picture is given of the condition of the pariah population, but the Collector states that their state is not appreciably lower than usual, and that none but habitual beggars are in present and actual want of food. Any measures which the Collector can suggest for the

amelioration of the condition of these poor people shall have the fullest and most careful consideration, but their general condition has but little to do with the question of the measures to be taken for relief of distress arising from the present scarcity.

4. In the Ponnéri and Tíruvallúr taluks which have suffered more than the rest of the district, the condition of the people remains unchanged. Nineteen minor irrigation works and one Public Works Department work, viz., the Arni diversion, are in progress in the former taluk and sixteen minor and two major irrigation works and five petty Local Fund works are in progress in the latter. In the Saidápet taluk seventeen small tanks are under repair. According to the latest report, over 2,200 people are employed on the Government works above referred to, while considerable numbers are able to support themselves by working in the fields or by selling grass, firewood, &c. Some of the works were recently visited by the Commissioner on his return from his inspection of the Kálahasti zemindari, and he thinks it necessary that early arrangements should be made by the Public Works Department to start two more large works at an early date in the Ponnéri and Tiruvallúr taluks and to strengthen the staff of overseers, so that no difficulty whatever may be experienced in measuring up the work done by the coolies from day to day in view to daily payments being introduced on all works. A Deputy Tahsildar will be shortly appointed in each of the taluks of Tiruvallúr and Ponnéri to aid the Tahsildars and to enable them to move more freely about their taluks. This will probably be sufficient assistance for the present, especially as there is at present an Assistant Collector in the district who is available for inspection work. Fortunately prices of food-grains are very steady and show no tendency to rise. On the contrary they have slightly fallen in some taluks. But the position is becoming sufficiently grave to require most anxious watching, and it is necessary that the hands of the District officers should be strengthened as early as possible.

(A true Copy and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Secretary to Government, Revenue Department,
with copies of enclosures.

„ Collector of the Chingleput District.

Copy to the Land Revenue Department.

Order—dated 17th March 1891, No. 212, Revenue.

Miscellaneous.

Minor irrigation works should be put in hand at once in the Tirupórúr and Acharavakam firkas. Orders will issue in the Public Works Department for the immediate commencement of two more large works in the taluks of Ponnéri and Tiruvallúr and for the necessary addition to the staff of overseers. The works should be carried on *departmentally* and arrangements should be made for daily payments.

2. The Collector has already been authorized to entertain two additional Deputy Tahsildars for the taluks of Ponnéri and Tiruvallúr. The Saidápet Deputy Collector has now been invested with first-class magisterial powers and the Collector's hands will be further strengthened by the appointment of an additional Deputy Collector as requested in paragraph 13 of his letter.

3. Adverting to paragraph 3 (i) of the Collector's letter, the Government desires to have a report as to the "easy means" of amelioration referred to. The matter should, however, not be mixed up with the measures now being taken for the relief of distress but should be dealt with in a separate communication.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

ORDER—dated 19th March 1891, No. 808 W., Public Works.

Communicated to the Chief Engineer for Irrigation, who will issue the necessary instructions with respect to the immediate commencement of such additional works as may be practicable in the taluks named. Additional upper subordinates have recently been posted to the Chingleput division, and the Superintending Engineer, V Circle, will report, without delay, what further staff is required to admit of the works being carried out departmentally with daily payments.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation.
" Superintending Engineer, V Circle.
" Examiner, Public Works Accounts.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 19th.

Recd. *Encl.*

G.O., 19th Mar. 1891, No. 808 W.

MARCH.

Relief Works, Chingleput District

Proceedings, Revenue Department, directing that additional public works should be commenced at once and carried on departmentally, communicated to the Chief Engineer for Irrigation with remarks.

PUBLIC WORKS DEPARTMENT.

LETTER—to

THE RIGHT HONORABLE THE SECRETARY OF STATE FOR INDIA.

MY LORD,

We have the honor to forward, for Your Lordship's information, extract from inspection notes by our Chief Engineer, Colonel Pennycuick, R.E., on the Periyár project works, from which it will be seen that it is proposed to obtain the following for use on the works:—

Paras. 7, 11, 12 and 13.

1 steamer, | 1 winding engine, | 1 electric lighting plant,

and, as Colonel Pennycuick is proceeding to England on privilege leave, we think it desirable that his special knowledge of requirements should be utilised in aiding to select this machinery. A similar course was adopted* in 1888 and the results were economical and most satisfactory. It is not anticipated that Colonel Pennycuick will find any difficulty in making the necessary arrangements within the period of his leave.

* *Vide* despatch to Secy. of State No. $\frac{15}{2314}$ W., dated 29th August 1887. Despatch from Secretary of State, No. 9 (Public Works), dated 20th October 1887.

2. We would also invite attention to para. 8 of the Chief Engineer's inspection notes, and, with reference to his remarks therein, request that the demand for the turbine, made in our despatch No. $\frac{11}{368}$ I., dated 3rd July 1890, may be considered as cancelled.

We have the honor to be,

My Lord,

Your Lordship's most obedient, humble servants,

(Signed) WENLOCK.

(„) H. E. STOKES.

(„) J. H. GARSTIN.

(True Copy.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
19th March 1891.

GOVT. OF MADRAS.

PUBLIC WORKS DEPARTMENT.

(Copy.)

LETTER to the Right Honorable the Secretary of State for India.

No. $\frac{7}{809 \text{ W.}}$, dated 19th Mar. 1891.

Steamer, &c., for the Periyar Project

Forwarding a copy of the inspection notes by Colonel Pennycuick, R.E., Chief Engineer, Public Works Department, and requesting to allow Colonel Pennycuick, while in England on privilege leave, to select the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

Read—the following paper:—

From Lieut.-Colonel A. G. BEGBIE, R.E., Deputy Secretary to the Government of India, Public Works Department (Account—Civil Works), to the Secretary to the Government of Madras, Public Works Department, dated Calcutta, 5th March 1891, No. 71 A.—E.W.

I am directed to acknowledge the receipt of your letter No. 3225 W. of the 5th December last, and in reply to state that rule XI, part IV, appendix M. of the Public Works Department Code (Volume I), should be read as defining the restrictions under which a grant can be given under rule X, and not as an independent authority for contributing towards the cost of a church.

2. I am to add that, in the case of the Guntúr church, no Government contribution is admissible.

Order—dated 20th March 1891, No. 810 W., Public Works.

Communicated to the Ecclesiastical Department with reference to G.O. No. 3224 W., dated 5th December 1890.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Ecclesiastical Department.
" Superintending Engineer, II Circle.
" Examiner, Public Works Accounts.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 20th.

Recd. *Encl.*

G.O., 20th Mar. 1891, No. 810 W.

MARCH.

Guntur Church

Letter from the Government of India defining rule XI, part IV of the revised Ecclesiastical rules and stating that no Government contribution is admissible for the —, communicated to the Ecclesiastical Department.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

Read—the following paper:—

From H. S. TAYLOR, Esq., Superintendent of Works, No. I Periyár Division, to the Chief Engineer, Public Works Department, dated Periyár, 27th February 1891, No. 448 S.E.

Adverting to para. 184, rule III of the Public Works Code, I have the honor to submit, for your approval and sanction, the enclosed statement of proposition for temporary establishment required for the official year 1891-92.

2. In this statement the establishment* of the late Superintending Engineer's office which has been ordered to be retained (*vide* G.O. No. 3276 W. of 9th December 1890) is included.

	RS.
*1 clerk, 2nd class, 3rd grade ...	125
1 do. 4th " "	50
1 messenger	10
	185

3. The following establishment is also included in the statement, as it is absolutely necessary:—

	RS.
† 2 lascars, each at Rs. 9	18
‡ 1 clerk, 4th class, 3rd grade	30
‡ 2 lascars, each at Rs. 9	18
§ 2 do. do.	18

† For employment under Overseer Sergeant Coglan lately transferred.
‡ For employment under Assistant Engineer.
§ For employment under the Workshop Superintendent.

Enclosure.

PERIYAR PROJECT.

Statement of proposition for temporary establishment required for No. I Periyár Division during the year 1891-92.

Order sanctioning present establishment, Government of Madras, Public Works Department.		Office to which the proposition refers.	Nature of change.												Proposition.						Remarks.
			Present scale.						Proposed scale.						Permanent.		Temporary.				
					Pay.						Pay.				Increase per month.	Decrease per month.	Increase per month.		Decrease per month.		
No.	Date.		Number.	Designation.	Minimum.	Increment.	Maximum.	Average or fixed.	Number.	Designation.	Minimum.	Increment.	Maximum.	Average or fixed.	Amount.	Amount.	Period.	Amount.	Period.	Amount.	
				Office of the Superintendent of Works, No. I Periyar Division.	RS.	RS.	RS.	RS.		Office of the Superintendent of Works, No. I Periyar Division.	RS.	RS.	RS.	RS.	RS.	RS.		RS.		RS.	
				Upper Subordinate Establishment.						*Upper Subordinate Establishment.*											
			1	Surveyor	..	..	..	100	1	Surveyor	..	..	..	100	..	..	..	..	..	..	
				Lower Subordinate Establishment.						*Lower Subordinate Establishment.*											
3320 W.	13th Dec. 1890.		2	Sub-Overseers ..	..	..	..	140	2	Sub-Overseers ..	..	..	..	140	..	..	..	..	..	..	
			2	Do. ..	..	..	..	90	2	Do. ..	..	..	..	90	..	..	..	..	..	..	
				Office Establishment.						*Office Establishment.*											
3276 W.	9th ,, ,,		1	Clerk, 2nd class, 3rd grade	..	..	..	125	1	Clerk, 2nd class, 3rd grade	..	..	..	125	..	..	..	..	..	..	
3320 W.	13th ,, ,,		1	Do. 3rd ,, 2nd ,,	..	..	..	84	1	Do. 3rd ,, 2nd ,,	..	..	..	84	..	..	..	..	..	..	
			1	Do. 3rd ,, 3rd ,,	..	..	..	60	1	Do. 3rd ,, 3rd ,,	..	..	..	60	..	..	..	..	..	..	
3276 W.	9th ,, ,,		1	Do. 4th ,, 1st ,,	..	..	..	50	1	Do. 4th ,, 1st ,,	..	..	..	50	..	..	..	..	..	..	
			2	Clerks 4th ,, 2nd ,,	..	..	..	90	2	Clerks 4th ,, 2nd ,,	..	..	..	90	..	..	..	..	..	..	
			3	Do. 4th ,, 2nd ,,	..	..	..	120	*a* 3	Do. 4th ,, 2nd ,,	..	..	..	120	..	..	..	..	..	..	(*a*) For 3 sub-divisions.
			7	Do. 4th ,, 3rd ,,	..	..	..	210	*b* 8	Do. 4th ,, 3rd ,,	..	..	..	240	..	..	..	30	..	..	(*b*) 3 for division office. 1 for tunneller. 2 for supervisors at Periyár. 1 for Workshop Superintendent. 1 for the Assistant Engineer. — 8 —
3320 W.	1890.	No. I Periyár Division.																			

G.O. No.	13th December	Office of the Superintendent of Works,	1	Cashier	..	..	..	60	1	Cashier	..	..	..	60	..	..	..	..	..	..	
			3	Clerks, 4th class, 3rd grade.	..	..	..	90	c 3	Clerks, 4th class, 3rd grade.	..	..	..	90	..	..	..	..	..	..	(c) For 3 overseers and supervisors.
			1	Draftsman, 1st-class ..	..	..	..	72	1	Draftsman, 1st class ..	..	..	..	72	..	..	..	..	..	..	
			1	Do. 3rd „ ..	..	..	..	30	1	Do. 3rd „ ..	..	..	..	30	..	..	..	..	..	..	
			6	Messengers at Rs. 10 ..	..	..	..	60	d 6	Messengers at Rs. 10 ..	..	..	..	60	..	..	..	..	..	..	(d) 3 for division office. 3 for 3 sub-divisional offices. — 6 —
				Petty Establishment.						*Petty Establishment.*											
			2	Storekeepers at Rs. 48 ..	..	..	..	96	2	Storekeepers	..	..	..	96	..	..	..	..	..	..	
			1	Storekeeper	..	..	..	60	1	Storekeeper	..	..	..	60	..	..	..	..	..	..	
			25	Lascars at Rs. 9 ..	..	..	..	225	e31	Lascars	..	..	..	279	..	..	..	54	..	..	(e) 4 for division office. 9 for 3 sub-division offices. 2 for Assistant Engineer. 4 for 2 supervisors. 8 for 4 overseers and supervisors. 2 for Workshop Superintendent 2 for Mechanical Engineer. — 31 —
			1	Watchman, divisional office.	..	..	..	9	1	Watchman, divisional office.	..	..	..	9	..	..	..	..	..	..	
			4	Watchmen for stores at Thekady and Periyár.	..	..	..	36	4	Watchmen for stores at Thekady and Periyár.	..	..	..	36	..	..	..	..	..	..	
				Medical Establishment.						*Medical Establishment.*											
			1	Civil Apothecary ..	..	..	..	50	1	Civil Apothecary, Periyár	..	..	..	50	..	..	..	..	..	..	
			1	Hospital Assistant, Thekady.	..	..	..	35	1	Hospital Assistant, Thekady.	..	..	..	35	..	..	..	..	..	..	
			2	Peons for Periyár hospital.	..	..	..	18	2	Peons for Periyár hospital.	..	..	..	18	..	..	..	..	..	..	
			1	Peon for Thekady hospital.	..	..	..	9	1	Peon for Thekady hospital.	..	..	..	9	..	..	..	..	..	..	
				Total ..	..	..	..	1,919		Total ..	..	..	..	2,003	..	..	..	84	..	..	

(Signed) H. S. TAYLOR,
Superintendent of Works, No. I Periyár Division.

Periyar,
27th February 1891.

No. 1527.

Entries in column "Present scale" of the proposal statement have been checked and found correct.

2. The surveyor on Rs. 100 per mensem applied for should be sanctioned under "Upper subordinate" instead of under "Office establishment."

(Signed) C. H. P. CHRISTIE, Major, R.E.,
Examiner, Public Works Accounts.

12th March 1891.

Order—dated 21st March 1891, No. 827 W., Public Works.

The establishment required for No. I Periyár Division during 1891-92 is sanctioned as proposed by the Superintendent of Works in the statement submitted with his letter above recorded.

2. This sanction has been registered as Provincial No. 93 W. of 1890-91 and classified as Establishment, Temporary.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintendent of Works, No. I Periyár Division.
„ Examiner, Public Works Accounts.

GENERAL.
ESTABLISHMENT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 21*st*.

Recd. *Encl.*

G.O., 21st Mar. 1891, No. 827 W.

MARCH.

Establishment

The — required for No. I Periyár Division during 1891-92, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

Read—the following paper :—

From J. W. MARTIN, Esq., Officiating Superintending Engineer, VI Circle, to the Chief Engineer, Public Works Department, dated Trichinopoly, 10th March 1891, No. 1606 T.C.

In forwarding the accompanying copy of endorsement No. 224 of the 6th instant from the Officer Commanding Trichinopoly, I have the honor to state that in G.O. No. 347 W. of the 6th February 1891, the estimate, amounting to Rs. 4,400, was sanctioned for reconstructing the roof of hospital wards Nos. 12 and 13 of the 1st Pioneer lines, but funds have not been allotted for the work.

2. From G.O. No. 3411 W. of 22nd December 1890, which accompanied the preliminary issue of the budget for 1891-92, it is observed that for incomplete major and minor works there are only Rs. 5,000 at the disposal of Government. However the work will be included in the statement of demands for incomplete work of 1890-91 and for sanctioned works of urgent nature to be submitted by the 10th of May next; in the meantime I request that you will be good enough to let me know whether the work can be put in hand in anticipation of allotment of funds, as the military authorities wish to have it completed as early as possible.

Enclosures.

From Captain A. G. BURN, Deputy Assistant Adjutant-General, Southern District, to the Officer Commanding Trichinopoly, dated Wellington, 2nd March 1891, No. 873 B.

The Brigadier-General Commanding having noticed the crowded state of the hospital ward at Trichinopoly, wished to be informed what action has been taken to remedy this undesirable state of affairs.

2. Information is also requested as to whether the roof of the second ward of the hospital is being repaired.

From Lieutenant-Colonel H. M. DALE, Commanding Trichinopoly, to the Assistant Adjutant-General, Southern District, dated Trichinopoly, 6th March 1891.

In reply to your No. 673 B., dated 2nd March 1891, regarding the crowded state of the ward of the hospital of the north lines at Trichinopoly, I have the honor to inform you that the number of patients is now somewhat less than that it was when the Brigadier-General made his inspection.

2. In reply to para. 2, anent the roof of the second ward, it is not yet repaired, as the orders of Government sanctioning the outlay had not arrived. These have now been received and the District Engineer will be requested to push on the work as speedily as possible.

No. 224.

Forwarded to the Superintending Engineer, IV Circle, Trichinopoly, for information with reference to G.O., dated 6th February 1891, No. 347 W. (Military Department No. 1136 of 21st February 1891).

2. Requests that the necessary steps may be taken to complete the work as early as possible.

(Signed) H. M. DALE, Lieut.-Colonel,
Commanding Trichinopoly.

6th March 1891.

Order—dated 21st March 1891, No. 828 W., Public Works.

Ordered that the Government of India be addressed.

[Here enter No. 829 W., dated 21st March 1891.]

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, VI Circle.

BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 21st.

Recd. *Encl.*

G.O., 21st Mar. 1891, No. 828 W.

MARCH.

Pioneer Lines at Trichinopoly

Ordered that the Government of India be addressed on the subject of an allotment for reconstructing the roof of hospital wards Nos. 12 and 13 of the 1st —.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

Letter—from

Colonel J. PENNYCUICK, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

The SECRETARY to the GOVERNMENT of INDIA,
Military Department.

Sir,

In forwarding herewith copy of Proceedings of this Government, No. 828 W., dated 21st March 1891, I am directed to request that a sum of Rs. 4,400, or Rupees 5,478 inclusive of percentage charges, may be allotted for reconstructing the roof of hospital wards Nos. 12 and 13 of the 1st Pioneer lines at Trichinopoly, the estimate for which was sanctioned by this Government in its Proceedings No. 347 W., dated 6th February 1891 (copy attached). The work is reported to be of an urgent nature, and it is not possible to provide the amount from the small reserve of Rs. 5,000 which is required for incomplete Major and Minor works.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

Fort St. George,
21st March 1891.

BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 21st.

Recd. *Encl.*

21st Mar. 1891, No. 829 W.

MARCH.

Pioneer Lines at Trichinopoly

Requesting to allot Rs. 5,478 for reconstructing the roof of hospital wards Nos. 12 and 13 of the 1st.—.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Military Works.
Account.

Read—the following paper :—

From Major-General E. H. H. COLLEN, C.I.E., Secretary to the Government of India, Military Department, to the Secretary to the Government of Madras, Public Works Department, dated Fort William, the 7th March 1891, No. 604/M.W.

I am directed to inform you it has been decided by the Government of India that, with effect from the ensuing financial year, the control of the grants for all minor and petty works of the Military Works Department in India, whether situated within Public Works or Military Works Divisions, shall be vested in the Director-General of Military Works, and the expenditure on such works finally brought to account by the Examiner of Accounts, Military Works.

2. In the case of minor and petty works situated within Public Works Divisions, the execution of which cannot be undertaken by the staff of the Military Works Department, the expenditure incurred by the local Public Works Department staff should be transferred to, and be finally adjusted by, the Examiner of Accounts, Military Works, in accordance with the procedure prescribed in Public Works Department Code, Volume II, Chapter XIII, para. 82.

3. I am to say that the necessary alterations in the grants provisionally sanctioned for the ensuing year will be made by the Government of India in passing orders on the Military Works budget estimates.

Copy of the foregoing forwarded to the Chief Commissioner, Burma, for information and guidance, with the remark that the orders regarding the transfer of expenditure on minor and petty works to the Examiner of Accounts, Military Works, will not apply to outlay incurred in Upper and Lower Burma. Such expenditure will be finally brought to account by the local Examiner of Public Works Accounts in the same way as all other expenditure on works which are at present under the control of the Director-General of Military Works.

Order—dated 21st March 1891, No. 830 W., Public Works.

Communicated to officers concerned for information and guidance.

2. The Code Committee will frame the necessary orders to the Madras Public Works Code.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary. to Govt., P.W.D.

To Superintending Engineers.
To the Examiner, Public Works Accounts.
" Military Department.

MILITARY WORKS.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 21st.

Read.

G.O., 21st Mar. 1891, No. 830 W.

MARCH.

Grants for all Minor and Petty Works of the Military Works Department

Letter from the Government of India deciding to invest the Director-General of Military Works with the control of the — from the ensuing financial year, and laying down the method of adjustment of expenditure on such works and on minor and petty works situated within Public Works Divisions and undertaken by the Public Works Department, communicated to officers concerned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

G.O., dated 16th March 1891, No. 496, Judicial.

Read—the following papers : —

From the Agent to the Governor, Vizagapatam district, dated 7th January 1891, No. 7.

From the Inspector-General of Jails, dated 19th February 1891, No. 68.

Order—dated 16th March 1891, No. 496, Judicial.

The question now raised cannot be satisfactorily disposed of until the cost of carrying out those improvements in the Párvatipur hill jail, which have already been approved, is known; the plans and estimates called for in G.O., dated 11th December 1890, No. 1974, Judicial, should, therefore, be expedited.

2. It is, moreover, essential that the exact effect of the Agent's proposals should be ascertained. From the "general summaries" attached to the Jail administration reports for the four years ending 1889, it appears that the daily average population of male prisoners during that period in the Párvatipur hill jail was 164·89, which means an average excess of population over accommodation, amounting to 44·89; but during the above period the annual admissions of male convicts numbered 373, and, of these, 104 or nearly 28 per cent. were on the average men sentenced to terms of imprisonment not exceeding 3 months; from this it may perhaps be deduced that, out of a daily average strength of 165 convicts, 46 would be prisoners under sentences of not more than 3 months' imprisonment. Mr. Willock's scheme would detain all such prisoners at Koraput, so that the extension of the subsidiary jail at that place would reduce the average daily strength of the Párvatipur hill jail to 119, a population for which the present accommodation is just sufficient. It is no doubt necessary to provide room for considerably more than the daily average strength, but the above figures suggest that the adoption of Mr. Willock's proposals will render possible a large reduction in the amount of additional accommodation, which it is at present proposed to provide for the Párvatipur hill jail

3. It is, however, desirable that exact statistics should be procured and the Inspector-General of Jails will, therefore, be requested to report at an early date the precise figures in respect of the average daily population of convicts, male and female, undergoing sentences of 60 to 90 and of 90 to 120 days in the Párvatipur hill jail, the prisoners from above ghâts being distinguished from those belonging to the lowlands; for this purpose an examination of the rolls for the 1st of each month for a few years will be sufficient.

Meanwhile, the elaborated proposals which it is understood that Mr. Willock intends to submit after his visit to Koraput are awaited.

(True Extract.)

A. BUTTERWORTH,
Acting Under-Secretary.

ORDER—dated 23rd March 1891, No. 844 W., Public Works.

Communicated to the Superintending Engineer, I Circle, for information and guidance, in continuation of G.O., No. 49 W., dated 7th January 1891, the plans and estimates required by which should be submitted as soon as possible.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle.

BUILDINGS AND ROADS.
CIVIL WOKKS.

Govt. of {1891} Madras

PUBLIC WORKS.

Da'ed March, 23rd.

Recd. Encl.

G.O., 23rd Mar. 1891, No. 844 W.

MARCH.

Parvatipur Hill Jail

Proceedings, Judicial Department, passing orders regarding improvements to the — and to the sub-jail at Koraput, communicated to the Superintending Engineer, I Circle, with instructions.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From the Superintending Engineer, IV Circle, dated 21st January 1891, No. 34 E.W.

From Lieut.-Colonel R. R. E. DRAKE-BROCKMAN, R.E., Superintending Engineer, IV Circle, to the Inspector-General of Registration, dated Ootacamund, 30th January 1891, No. 23 M.

I have the honor to forward, for transmission to Government for sanction, a revised plan and estimate, amounting to Rs. 7,610, for constructing a Sub-Registrar's office at Manantoddy, Wynaad taluk, Malabar district. The original estimate, amounting to Rs. 4,875, was sanctioned in G.O., No. 1123 W., of 26th April 1889.

2. As Manantoddy is much exposed to heavy rain and violent weather, it is absolutely necessary that the building, as per type design of 1888, should have verandah all round and should be roofed with mission tiles over continuous iron sheets. Chimneys have been provided together with some sundry alterations.

3. A comparative statement explaining the differences between the original and revised estimates is herewith forwarded.

No. 338 T.

Submitted to Government for sanction in substitution of the estimates sanctioned in G.O., dated 26th April 1889, No. 1123 W.

2. The necessity for the revision of the estimate is fully explained in the Superintending Engineer's letter.

KULITALAI, (Signed) S. SRINIVASA RAGHAVAIYANGAR,
18th February 1891. Inspector-General of Registration.

Approved and transferred to the Public Works Department.

(By Order.)

(Signed) A. BUTTERWORTH,
9th March 1891. Ag. Under-Secretary.

Note by the Chief Engineer, Public Works Department.

In G.O., No. 1123 W., dated 26th April 1889, an estimate, amounting to Rs. 4,875, for constructing a Sub-Registrar's office at Manantoddy was sanctioned.

2. The Superintending Engineer now submits a revised estimate, amounting to Rs. 7,610, showing an excess over the original estimate of Rs. 2,735.

3. The chief items of excess are due to the provision of a verandah all round the building, the substitution of continuous iron sheeting instead of planking in

combination with mission tiles for the roof, external plastering instead of pointing and other variations in flooring, doors and windows, which experience has shown to be necessary in the climate of Manantoddy.

4. The original estimate was drawn up in conformity with the type design, but the Chief Engineer would remark that such variations from type designs as are rendered necessary by local considerations of climate should in future receive attention when estimates are first submitted.

5. The revised estimate, amounting to Rs. 7,610, is now submitted for sanction.

ORDER—dated 23rd March 1891, No. 846 W., Public Works.

The revised estimate, amounting to Rs. 7,610, for constructing a Sub-Registrar's office at Manantoddy in the Malabar district, is sanctioned in supersession of the estimate of Rs. 4,875 sanctioned in G.O., No. 1123 W., dated 26th April 1889.

2. Attention is drawn to the note by the Chief Engineer, Public Works Department, above recorded.

3. This sanction has been registered as Provincial No. 115 W. of 1890-91, and classified as Civil Buildings, Original Works.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle, with six enclosures.
„ Examiner, Public Works Accounts.
„ Judicial Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 23rd.

Recd. *Encl.*

G.O., 23rd Mar. 1891, No. 846 W.

MARCH.

Sub-Registrar's Office at Manantoddy, Malabar District

Revised estimate of Rs. 7,610 for constructing a —, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From Colonel H. SMALLEY, R.E., Superintending Engineer, III Circle, to the Chief Engineer, Public Works Department, dated Bellary, 26th December 1890, No. 2861,

I have the honor to forward, for consideration and orders, copies of correspondence between the Chief Engineer, Military Works, Madras Command, and myself on the subject of the Provincial roads in Ramandrug sanitarium in the Sandúr estate, Bellary district, being taken charge of by the Military Works Department.

ENCLOSURES.

Copy of a letter from Colonel H. SMALLEY, R.E., Superintending Engineer, III Circle, to the Chief Engineer, Madras Command, Military Works, dated 11th December 1890, No. 2700.

The military buildings at the Ramandrug Sanitarium in the Bellary Collectorate are in the charge of your department, whilst the roads up to the Droog on either side are in the charge of this department, being classed as "Provincial" on account of their being in the Sandúr estate. Outside of the estate again, the roads are in charge of the Bellary Local Fund Board. There are also a few Provincial buildings on the plateau in charge of this department, viz., the church and cemetery, the Sub-Magistrate's office and Police lines, and one Imperial civil building, the Post office. Now it seems to me rather absurd that two departments should be working independently in this isolated place, and that it would be far better if all the work there were put in charge of one or other department, and *that* department would naturally be the Military Works Department. There are 21 miles of road (13 on one side and 8 on the other) in the Sandúr estate leading up to the Droog now in charge of the Public Works Department, and for these we have a maintenance allowance of Rs. 200 a mile with a lump sum of Rs. 500 to maintain the paths on the plateau. This allowance is, I think, sufficient, but it might possibly be increased if good cause were shown. A small sum would suffice to keep up the civil buildings. I don't know what is allowed for keeping up the military buildings; but, seeing they are valued at upwards of two lakhs of rupees, I should suppose not less than Rs. 2,000 per annum would be required for the purpose. An annual expenditure of not less than Rs. 7,000 may be expected on the plateau and immediate neighbourhood, and if this were concentrated under one department, I should think a sub-overseer might be kept permanently at Ramandrug, and that both roads and buildings would be better looked after than they can be at present. I think the Assistant Engineer, Military Works Department at Bellary, would easily inspect work monthly. The Sultanpoor camel lines are also in the same direction. I beg to commend this proposal for your consideration.

Copy of a letter from Lieut.-Colonel W. P. TOMKINS, C.I.E., R.E., Chief Engineer, Madras Command, Military Works, to the Superintending Engineer, III Circle, dated 17th December 1890, No. 7576.

I have the honor to acknowledge the receipt of your letter No. 2700, dated 11th instant.

2. The case of civil works at Ramandrug appears to fall under the provisions of para. 7 of Military Department letter, No. 1763 M.W., dated 4th September 1889, to the Government of Madras printed in Proceedings of Madras Government, No. 3615 W., Public Works, dated 21st December 1889, and copied in the margin.

7. The other military stations occupied by Madras troops would remain in charge of the Public Works Department; on the other hand the Military Works Department would be required to undertake charge of Civil Public Works, if so desired, in military stations where there is a Military Works establishment.

3. I would suggest that you should make your proposal to the Government of Madras unless the Executive Engineer sees grave difficulties. I see no objection to the scheme.

From Brigadier-General E. H. EYRE, Quartermaster-General, to the Secretary to Government, Military Department, dated Ootacamund, 10th March 1891, No. 513 M.W.

In returning as requested the correspondence referred to this office with Military Department Reference Order No. 287 of 16th January 1891, I am desired to report, for the information of Government, that the Commander-in-Chief is of opinion that the Military Works Department might act as the agent of the Government of Madras for the execution of repairs, &c., to the civil buildings at Ramandrug, but His Excellency considers it would not be suitable for that department to have anything to do with the roads. It would appear that the Local Fund roads are in continuation of the Provincial roads, and there would be divided responsibility for their maintenance. Moreover, the officers and subordinates of the Military Works Department would use the road between Hospet and Ramandrug, while the 8 miles on the other side of the plateau would be completely out of their beat.

No. 1523, Military.

Transferred to the Public Works Department with reference to its endorsement No. 74 C., dated 7th January 1891, the enclosures of which are herewith returned.

FORT ST. GEORGE, (Signed) A. KENNEY-HERBERT, Brigdr.-Genl.,
12th March 1891. Secretary to Government.

ORDER—dated 23rd March 1891, No. 847 W., Public Works.

The Provincial buildings at Ramandrug will be handed over to the Military Works Department for upkeep, and the maintenance grants for the works placed at the disposal of the Consulting Architect in accordance with the arrangements sanctioned in G.O., No. 246 W., dated 26th January 1891. The Superintending Engineer, III Circle, will report the sums to be thus transferred with effect from 1891-92. No change need be made in the current official year.

2. The question of placing the Provincial portion of the roads in charge of the Local Fund Board will be considered in the Local and Municipal Department.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, III Circle.
„ Consulting Architect to Government.
„ Examiner, Public Works Accounts.
„ Chief Engineer, Madras Command, Military Works.
„ Military Department.
„ Local and Municipal Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 23rd.

Recd. *Encl.*

G.O., 23rd Mar. 1891, No. 847 W.

MARCH.

Buildings at Ramandrug

Passing orders regarding the transfer of the Provincial — to the Military Works Department for upkeep and of the Provincial portion of the roads to the Local Fund Board.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following paper:—

From G. H. D. WALKER, Esq., Under Secretary to the Government of India, Public Works Department (General), to the Secretary to the Government of Madras, Public Works Department, dated Calcutta, the 6th March 1891, No. 659-G.

A proposal having been made to the Secretary of State for India to allow selected officers of the Public Works Department, while on furlough, to visit Engineering Works in Europe and America for the purpose of improving their professional knowledge on more liberal terms than were granted by the rules laid down in Public Works Department Circular No. 52, dated the 24th September 1873, His Lordship has replied that, while fully recognising the wish of the Government of India to encourage such efforts, he is unwilling to modify the rules of 1873 further than by extending the facilities offered by those rules to places outside the United Kingdom. At the same time he will be willing to consider separately any cases of officers who may be recommended by the Government of India for assistance in acquiring, during their furlough, knowledge on special branches or developments of the Engineering profession in Europe which would be useful to them in the discharge of their duties in India.

2. The above orders are communicated for the information of His Excellency the Governor in Council and in order that the case of any officer whom His Excellency wishes from time to time to recommend for special selection, on terms more liberal than those granted by the rules issued in 1873, may be reported to the Government of India for orders.

ORDER—dated 23rd March 1891, No. 848 W., Public Works.

Communicated to officers of the Public Works Department with reference to G.O., No. 2267, dated 15th September 1873.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation.
" Consulting Engineer for Railways.
To Superintending Engineers.
To the Consulting Architect to Government.
" Superintendent of Works, Periyár Project.
" Examiner, Public Works Accounts.

GENERAL
ESTABLISHMENT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 23rd.

Recd. *Encl.*

G.O., 23rd Mar. 1891, No. 848 W.

MARCH.

Engineering Works in Europe

Letter from the Government of India communicating orders of the Secretary of State regarding proposals for allowing selected officers of the Public Works Department, while on furlough, to visit — for purposes of improving their professional knowledge, communicated to officers of the Public Works Department.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following paper:—

From the Director-General of Stores, to the Secretary to the Government of Madras, Public Works Department, dated India Office, Whitehall, S.W., 26th February 1891, No. S. 1975.

From Governor, Madras, dated 2nd February 1891.

My telegram of 24th November last. Please inform me by wire when bridges may be expected.

With reference to the telegram noted in the margin, relative to the bridges for the Vayitri-Gúdalúr road, you will probably have learnt by telegram, before you receive this, what has been able to be done in regard to the 5′, 7′ 6″, 10′, 15′ and 20′ spans. Every effort is being made to get these off by the S.S. *Cuba*, announced to sail 21st March 1891, which is the last opportunity by which shipment can be made to Calicut before that port closes.

The 40′ and 50′ spans will, however, I regret, not be ready in time for the above vessel, as they are not due from the contractors until 7th April 1891, and I shall, therefore, be obliged by your informing me, by telegram, to what port they should be shipped and also the smaller spans should they miss the *Cuba*.

ORDER—dated 23rd March 1891, No. 849 W., Public Works.

Ordered that the following reply be sent by telegram to the Director-General of Stores, India Office, London:—

"In reply to your letter of 26th February last. If bridge work too late for Calicut may be shipped Madras."

2. The General Superintendent, Public Works Stores, will, on arrival of the iron bridges, arrange, in communication with the Superintending Engineer, IV Circle, for their transmission by rail to Calicut.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle.
" " V "

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 23rd.

Recd. *Encl.*

G.O., 23rd Mar. 1891, No. 849 W.

MARCH.

Bridges for the Vayitri-Gudalur Road

Telegram to the Director-General of Stores to ship the — to Madras if too late for Calicut.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following paper :—

From C. J. K. WATSON, Esq., Executive Engineer, Kálahasti Zemindari Irrigation Works, to the Superintending Engineer, IV Circle, dated Rénigunta, 15th March 1891, No. 79 M.

[Letter, dated 9th March 1891, No. 5 K.]

I have the honor to submit proposition statement for increased establishment required. It differs from that sent originally in my No. 31 M., dated 4th March 1891, in the following respect :—

(1) *Clerks.*—Pay of clerks with imprest-holders is reduced from Rs. 25 to 20 in accordance with para. 2 of your letter.

(*a*) For the head office two clerks are provided—one on Rs. 50 and one on Rs. 30. The changed system of supply of funds, involving copying cash-book, &c., requires this, and further makes it necessary that one of them at least shall have some knowledge of accounts. In accordance with Chief Engineer's verbal approval, I will, pending sanction, appoint two men.

(2) *Draughtsman.*—Here I ask for an increase of pay for the present incumbent. Rengasamy Iyengar was drawing Rs. 70 as head draughtsman, Nos. 3 and 6 Parties, Tank Restoration scheme at Bellary, till they were abolished in April 1890. He then became second draughtsman in No. I Party at Madura on Rs. 40. He did not volunteer to come to Rénigunta, but was ordered here and has sole charge, only receiving the same pay he had as second draughtsman at Madura. He has passed first-class examination, Draughtsman's test, Public Works Code.

(3) *Treasure guards.*—It having been settled that I am to have drawing accounts at the neighbouring sub-treasuries instead of the arrangement explained to you in person on 10th instant, the number of guards is reduced from 15 to 10. This last number may appear excessive, but it is only two men per cash chest and two over for escort duty, &c. Considering the places in which these chests have to be kept and taken about, we cannot do with less and I have asked the Pension Paymaster at Ránipet to send them at once.

(4) *Lascars.*—The area of the zemindari is 874 square miles and the head-quarters (Yeeped) is 6 miles from the nearest post office, and there are only 2 post offices in the whole zemindari. Almost all letters have therefore to be sent by special messenger, and over long distances.

Enclosure.

IV CIRCLE.

Statement of proposition for revision of establishment of the special sub-division, Kálahasti zemíndari irrigation works.

Order of Government sanctioning the present establishment — No.	Order of Government sanctioning the present establishment — Date.	Office to which the proposition refers.	Nature of change — Present scale — Number.	Present scale — Designation.	Present scale — Pay — Minimum.	Present scale — Pay — Increment.	Present scale — Pay — Maximum.	Present scale — Pay — Average or fixed.	Proposed scale — Number.	Proposed scale — Designation.	Proposed scale — Pay — Minimum.	Proposed scale — Pay — Increment.	Proposed scale — Pay — Maximum.	Proposed scale — Pay — Average or fixed.	Proposition — Permanent — Increase per month — Amount.	Proposition — Permanent — Decrease per month — Amount.	Proposition — Temporary — Increase per month — Period.	Proposition — Temporary — Increase per month — Amount.	Proposition — Temporary — Decrease per month — Period.	Proposition — Temporary — Decrease per month — Amount.	Remarks by Local Government.
553 W.	26th February 1891.	Special sub-division, Kálahasti zemindari irrigation works.	2	Overseers	..	..	..	RS. 80	2	Overseers	..	..	..	RS. 80	..	..	..	..	..	..	
			2	Surveyors	..	..	..	80	2	Surveyors	..	..	..	80	..	..	..	..	..	..	
			1	Clerk	..	..	..	35	1	Clerk	..	..	..	50	..	..	..	..	..	..	
			1	Draughtsman ..	..	..	..	40	1	Draughtsman ..	..	..	..	50	..	..	..	..	..	..	
									1	Clerk	..	..	..	30	..	..	..	..	..	..	
									3	Clerks	..	..	..	20	..	..	..	..	..	..	1 with supervisor. 2 with overseers.
									14	Lascars (petty) ..	..	..	..	6	..	..	..	..	..	..	2 each overseer. 1 each surveyor. 6 with Executive Engineer.
									10	Treasure guards ..	..	..	..	6	..	..	..	..	..	..	2 with each sub-division. 2 at head office. 2 as escort.

Renigunta,
15th March 1891.

(Signed) C. J. K. WATSON,
Ex. Engr., Kálahasti Zemindari Irrigation Works.

No. 137 W.

Submitted to the Chief Engineer, Public Works Department, with a request that he will be good enough to obtain sanction of Government to the accompanying revised proposition statement.

2. In the circumstances brought to notice in the foregoing letter, the undersigned recommends the scale of establishment now proposed.

(Signed) R. R. E. DRAKE-BROCKMAN, Lt.-Col., R.E.,
Superintending Engineer, IV Circle.

18th March 1891.

ORDER—dated 23rd March 1891, No. 855 W., Public Works.

The temporary establishment required for the Kálahasti sub-division, as detailed in the statement submitted by the Superintending Engineer, IV Circle, with his letter above recorded, is sanctioned.

2. The treasure guards provided in the statement are sanctioned under para. 1633 of the Public Works Code.

3. This sanction has been registered as Provincial No. 94 W. of 1890-91, and classified as Establishment, Temporary.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle.
„ Examiner, Public Works Accounts.
„ Revenue Department.

GENERAL.
ESTABLISHMENT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 23rd.

Recd. *Encl.*

G.O., 23rd Mar. 1891, No. 855 W.

MARCH.

Temporary Establishment

The — required for the Kilahasti sub-division, sanctioned.

GOVERNMENT OF MADRÀS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers:—

From Major D. McN. CAMPBELL, R.E., Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department (through the Examiner of Public Works Accounts), dated Chepâk, 14th February 1891, No. 71 W.

I have the honor to forward an indent on the Director-General of Stores in England for copper tape required in the Public Works Stores for lightning conductor. Hitherto copper plate cut into strips and revetted together, so as to form a tape, was used, and there was the risk of bad joints. This will be avoided by the use of copper tape, which, moreover, is cheaper.

Office-note from the Examiner, Public Works Accounts, dated Madras, 18th March 1891, No. 1655/153.

The accompanying letter from the Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, No. 71 W., dated 14th February 1891, with an indent (No. 17 of 10th February 1891) for English stores, for transmission to the Secretary of State, is forwarded for necessary action.

2. I certify that funds to meet the estimated outlay in England in connection with this indent, during the year 1891-92, will be provided by the Local Government to the extent of £136-5-9 in the estimate of the Public Works Department for that year.

ORDER—dated 24th March 1891, No. 864 W., Public Works.

Ordered that the indent be forwarded to the Home Government for compliance.

(Here enter No. 865 W., dated 24th March 1891.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, V Circle.
„ Examiner, Public Works Accounts.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 24th.

Recd. *Encl.*

G.O., 24th Mar. 1891, No. 864 W.

MARCH.

Copper Tape

Ordered that the indent for — required in the Public Works Stores, Madras, be forwarded to the Home Government.

PUBLIC WORKS DEPARTMENT.

General.
Account.

LETTER—from

COLONEL J. PENNYCUICK, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

THE DIRECTOR-GENERAL OF STORES,
INDIA OFFICE,
LONDON.

SIR,

I am directed to forward, for favor of compliance, an indent, in duplicate, for copper tape required in the Public Works Stores, Madras.

2. The certificate of the Examiner of Public Works Accounts is embodied in the Proceedings * of Government forwarded herewith.

* No. 864 W., dated 24th March 1891.

(Here enter No. 866 W., dated 24th March 1891.)

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
24th March 1891.

ENDORSEMENT—dated 24th March 1891, No. 866 W., Public Works.

Copy of the above, with copy of the indent, forwarded to the Government of India for information.

(By Order.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 24th.

Recd. *Encl.*

24th Mar. 1891, Nos. 865, 866 W.

MARCH.

Copper Tape

Forwarding copy of indent for — required in the Public Works Stores, Madras.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following papers :—

No. 1741 T.

Note by the Chief Engineer for Irrigation.

The accompanying statement of special establishment required for investigation in the Tank Restoration Scheme from 1st March 1891 to 28th February 1892 is forwarded to the Chief Engineer, Public Works Department, with reference to his memorandum No. 3965 C., dated 2nd October 1890.

2. The only change which it is proposed to make in the arrangement of the parties is as follows. The two sub-parties, known as No. VII Party, working under the Executive Engineers, Godávari Eastern and Western divisions, will be transferred to a party to be formed for the Kistna district in accordance with G.O. No. 363 I., dated 30th June 1890. This party will be known as No. VII Party, and will, like the other full parties, work directly under the orders of the Chief Engineer for Irrigation, Tank Restoration Scheme.

3. The total cost of special establishment now proposed is Rs. 63,780, or Rs. 6,256 in excess of that provided for the current year, the increase being due to the formation of an independent party instead of the two sub-parties attached to the Godávari Eastern and Western divisions.

4. The appointment of the eight extra overseers for the supervision of Tank Restoration Scheme execution, asked for in this office note No. 2338, dated 9th December 1889, has resulted in a proportionate amount of the Tank Restoration Scheme grants being utilised in the various divisions up to date, and it is considered advisable that the same number should be employed with one more temporary overseer to be attached to the VI Circle for employment on Tank Restoration Scheme works in Tinnevelly district, where there will be a considerable expenditure next year.

(Signed) G. T. WALCH,
Chief Engineer for Irrigation,
Tank Restoration Scheme.

1st November 1890.

To the Chief Engineer, Public Works Department,
General and Road and Building Branch.

ENCLOSURE.

PROPOSITION statement showing the special establishment required for the Tank Restoration Scheme for 1891-92.

Number.	Date.	Office to which the proposition refers.	Nature of changes. Present scale. Number.	Present scale. Designation.	Present scale. Average or fixed pay.	Proposed scale. Number.	Proposed scale. Designation.	Proposed scale. Average or fixed pay.	Proposition. Permanent. Increase. Amount.	Permanent. Decrease. Amount.	Temporary. Increase. Period.	Temporary. Increase. Amount.	Temporary. Decrease. Period.	Temporary. Decrease. Amount.
					RS.			RS.	RS.	RS.		RS.		RS.
		Head-quarters Office, Tank Restoration Scheme.	1	Clerk	170	1	Clerk	170	..	..	..	..	For twelve months.	..
			1	Do.	96	1	Do.	96	..	..	..	..		..
			1	Do.	38	1	Do.	38	..	..	..	..		..
			1	Do.	32	1	Do.	32	..	..	..	..		..
			1	Do.	24	1	Do.	24	..	..	..	..		..
			1	Do.	17	1	Do.	17	..	..	..	..		..
			1	Draughtsman	96	1	Draughtsman	100	..	..	..	4		..
			1	Do.	66	1	Do.	66	..	..	..	..		..
			1	Do.	40	1	Do.	40	..	..	..	..		..
			1	Do.	38	1	Do.	40	..	..	..	2		..
			2	Draughtsmen at Rs. 30 each ..	60	2	Draughtsmen at Rs. 30 each ..	60	..	..	..	..		..
			1	Draughtsman	25	1	Draughtsman	25	..	..	..	..		..
			6	Tracers at Rs. 12 each ..	72	4	Tracers	48	..	..	..	..		24
			1	Muchee	12	1	Muchee	12	..	..	..	..		..
			1	Messenger	10	1	Messenger	10	..	..	..	..		..
			2	Messengers at Rs. 7 and 6 ..	13	2	Messengers at Rs. 7 and 6 ..	13	..	..	..	..		..
			1	Waterman	1	1	Waterman	1	..	..	..	..		..
				Total per mensem ..	810		Total per mensem ..	792	..	..	..	6		24
				Total per annum ..	9,720		Total per annum ..	9,504	..	..	..	72		288
		No. I Party, Tank Restoration Scheme.	1	Clerk	35	1	Clerk	35	..	..	..	..		..
			1	Do.	25	1	Do.	25	..	..	..	..		..
			1	Do. and Draughtsman ..	20	1	Do. and Draughtsman ..	20	..	..	..	..		..
			1	Draughtsman	50	1	Draughtsman	50	..	..	..	..		..
			1	Do.	40	1	Do.	40	..	..	..	..		..
			4	Lascars at Rs. 6 each	24	4	Lascars at Rs. 6 each	24	..	..	..	..		..
				Total per mensem ..	194		Total per mensem ..	194	..	..	..	..		..
				Total per annum ..	2,328		Total per annum ..	2,328	..	..	..	..		..

G.O. No. 641 W. Dated 28th February 1890.	No. II Party, Tank Restoration Scheme.	1	Clerk	35	1	Clerk	35	..	..	..	..		..
		2	Clerks and Clerk or Assistant Draughtsman at Rs. 25 each ..	50	1	Do. or Assistant Draughtsman ..	25	..	..	..	..		25
		1	Draughtsman	60	1	Draughtsman	60	..	..	..	..		..
		1	Do.	40	1	Do.	40	..	..	..	..		..
		4	Lascars	24	3	Lascars at Rs. 6 each	18	..	..	..	..		6
			Total per mensem ..	209		Total per mensem ..	178	..	..	..	..		31
			Total per annum ..	2,508		Total per annum ..	2,136	..	..	..	..		372
	No. III Party, Tank Restoration Scheme.	3	Clerks, one at 40 and two at Rs. 25.	90								For one month.	
		1	Draughtsman	50									
		1	Do.	30									
		4	Lascars	24									
			Total per mensem ..	194									..
			Total for one month ..	194									194
	No. IV Party, Tank Restoration Scheme.	3	Clerks at Rs. 40, 25 and one clerk or assistant draughtsman, Rs. 20.	85	3	Clerks at Rs. 46, 25 and one clerk or assistant draughtsman Rs. 20.	85	..	..	..	..	For twelve months.	..
		2	Draughtsmen at Rs. 40 and 30 ..	70	2	Draughtsmen at Rs. 50 and 30 ..	80	..	..	..	10		..
		4	Larcars at Rs. 6 each	24	4	Lascars	24	..	..	..	..		..
		1	* Sweeper	2	1	Sweeper	2	..	..	..	..		..
			Total per mensem ..	181		Total per mensem ..	191	..	..	..	10		..
			Total per annum ..	2,172		Total per annum ..	2,292	..	..	..	120		..
	No. V Party, Tank Restoration Scheme.	2	Clerks at Rs. 25 and 20 ..	45	2	Clerks at Rs. 20 and 20	45	..	..	..	..		..
		2	Draughtsman, Rs. 50 and 20 ..	70	2	Draughtsmen at Rs. 50 and 30 ..	80	..	..	..	10		..
		3	Lascars at Rs. 6 each	18	3	Lascars at Rs. 6 each	18	..	..	..	..		..
			Total per mensem ..	133		Total per mensem .	143	..	..	..	10		..
			Total per annum ..	1,596		Total per annum ..	1,716	..	..	..	120		..
	No. VI Party, Tank Restoration Scheme.	2	Clerks at Rs. 35 and 20 ..	55								For one month.	
		2	Draughtsmen	80									
		4	Lascars at Rs. 6 each	24									
			Total per mensom ..	159									..
			Total for one month ..	159									159
	No. VII Party, Tank Restoration Scheme.	2	Clerks at Rs. 20 each	40	3	Clerks at Rs. 30 and two at Rs. 20 each	70	..	..	..	30	For twelve months.	..
		2	Draughtsmen at Rs. 30 each ..	60	3	Draughtsmen—one at Rs. 40 and two at 30	100	..	..	..	40		..
		2	Lascars at Rs. 6 each	12	6	Lascars at Rs. 6 each	36	..	..	..	24		..
			Total per mensem ..	112		Total per mensem ..	206	..	..	..	94		..
			Total per annum ..	1,344		Total per annum ..	2,472	..	..	..	1,128		..

* G.O. No. 1570 W., dated 6th June 1890.

Proposition statement showing the special establishment required for the Tank Restoration Scheme for 1891-92—*cont.*

Number.	Date.	Office to which the proposition refers.	Nature of changes.						Proposition.					
			Present scale.			Proposed scale.			Permanent.		Temporary.			
									Increase.	Decrease.	Increase.		Decrease.	
			Number.	Designation.	Average or fixed pay.	Number.	Designation.	Average or fixed pay.	Amount.	Amount.	Period.	Amount.	Period.	Amount.
					RS.			RS.	RS.	RS.		RS.		RS.
G.O. No. 641 W.	Dated 28th February 1890.	No. VIII Party, Tank Restoration Scheme.	1	Clerk	20	1	Clerk	20	..	..	..	..	For twelve months.	
			1	Draughtsman	30	1	Draughtsman	30	..	..	..	..		
			1	Lascar	6	1	Lascar	6	..	..	..	..		
				Total per mensem ..	56		Total per mensem ..	56	..	..	..	..		
				Total per annum ..	672		Total per annum ..	672	..	..	..	..		
G.O., No. 183 W.	Dated 21st January 1891.					1	Clerk	20	..	..	..	20		
						1	Draughtsman	30	..	..	..	30		
						1	Lascar	6	..	..	..	6		
							Total per mensem ..	56	..	..	..	56		
							Total per annum ..	672	..	..	..	672		
				Grand Total ..	20,693		Grand Total ..	21,792	..	..	..	2,112		1,013

(Signed) G. T. WALCH,
Chief Engineer for Irrigation, Tank Restoration Scheme.

6th March 1891.

No. 341 T.

To the Chief Engineer, Public Works Department, with reference to his memo. No. 985 C., dated 21st February 1891.

From the Examiner, Public Works Accounts, dated Madras 17th March 1891, No. 1624.

ORDER—dated 24th March 1891, No. 867 W., Public Works.

The special establishment required for the Tank Restoration Scheme during 1891-92, as detailed in the statement submitted by the Chief Engineer for Irrigation with his No. 341 T., dated 6th March 1891, is sanctioned.

2. This sanction has been registered as Provincial No. 95 W. of 1890-91, and classified as Establishment, Temporary.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary. to Govt., P.W.D.

To the Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.

GENERAL.
ESTABLISHMENT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 24th.

Recd. *Encl.*

G.O., 24th Mar. 1891, No. 867 W.

MARCH.

Establishment

Sanctioning the special — required for the Tank Restoration Scheme in 1891-92.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From the Presidency Port officer, Madras,	dated	7th November 1890,	No. 1056/543 G.
Endorsement in the Marine Department,	"	21st " "	
From the Presidency Port Officer, Madras,	"	16th December "	No. 1056/601 G.
Endorsement in the Marine Department,	"	20th " "	
From the Presidency Port Officer, Madras,	"	3rd March 1891,	No. 1056/72 G.
Endorsement in the Marine Department,	"	7th " "	

From J. W. MARTIN, Esq., Officiating Superintending Engineer, VI Circle, to the Chief Engineer, Public Works Department, dated Trichinopoly, 11th March 1891, No. 1173 T. N.

Adverting to your memo. No. 4959 C., dated 1st December 1890, in the matter of preparing a plan and estimate for an iron goods shed at Tuticorin, I have the honor to forward a plan and estimate, amounting to Rs. 8,000, if H steel columns are used, or Rs. 7,880 if the columns are made of old rails.

2. The cause of the small difference between the two estimates is that the South Indian Railway Company has lately increased the price of old rails to nearly double the price charged some years ago. As the saving that would result by using old rails instead of H steel would be very little, I recommend that the estimate, amounting to Rs. 8,000, should be sanctioned.

3. In this estimate a lump sum of Rs. 7,000 is provided for the iron work. The Executive Engineer arrived at this amount by submitting his design to—

Messrs. Massey and Co., Madras.
" Richardson and Cruddas, Bombay.
" A. and J. Main and Co., Calcutta.
" Walker and Co., Colombo.

All the tenders agree fairly well with the amount, Rs. 7,000, entered in the estimate, taking contingencies into account. Consequently I consider the estimate is reliable and I recommend that it should be sanctioned, giving permission to the Executive Engineer to obtain the iron work from one of the firms named.

Note by the Chief Engineer, Public Works Department.

The Superintending Engineer, IV Circle, with his letter No. 1173 T. N., dated 11th March 1891, forwards two alternative estimates for the construction of an iron goods shed at Tuticorin.

One estimate, amounting to Rs. 8,000, provides for the use of entirely new material. The alternative estimate, in which the use of old iron rails for the uprights is proposed, amounts to Rs. 7,880.

There is but little difference between the amount of the two estimates, and seeing that better connections can be obtained between the framing and the roof with the uprights by the use of new material, the Chief Engineer recommends for sanction the estimate amounting to Rs. 8,000.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Chief Engineer, P.W.D.

ORDER—dated 24th March 1891, No. 868 W., Public Works.

The estimate, amounting to Rs. 8,000, for constructing a corrugated iron goods shed at Tuticorin in the Tinnevelly district is sanctioned.

2. If the iron work required is of European manufacture, the Superintending Engineer will submit, for the sanction of Government, a formal application for sanction to purchase it locally.

3. The Financial Department will be requested to place a sum of Rs. 9,852, as shown in the margin, at the disposal of the Public Works Department in April next.

	RS.
Works	8,000
Establishment	1,840
Tools and plant	12
Total ...	9,852

4. The sanction accorded in para. 1 of these Proceedings has been registered as Excluded Local No. 40 W. of 1890-91.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, VI Circle, with eight enclosures.
" Examiner, Public Works Accounts.
" Marine Department.
" Financial Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 24th.

Recd. *Encl.*

G.O., 24th Mar. 1891, No. 868 W.

MARCH.

Goods Shed

Estimate of Rs. 8,000 for constructing a corrugated iron — at Tuticorin, Tinnevelly district, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—again the following paper:—

G.O., dated 9th December 1890, No. 3281 W., Public Works.

READ—also the following paper:—

Proceedings of the Board of Revenue (Land Revenue), dated 12th February 1891, Mis. No. 958.

MR. G. MCWATTERS.

Read—the following papers:—

Government Order, dated 22nd November 1890, No. 7177, Mis., Revenue, and the following reference thereon, dated 3rd December 1890.

The Board is not yet in possession of the plans and estimates for any of the buildings referred to. The Collector is requested to report when they are likely to be submitted and whether it will be possible to spend the proposed allotments within the year.

From A. T. ARUNDEL, Esq., Collector of Kistna, dated 9th January 1891, No. 309.

I have the honor to reply to Board's reference, dated 3rd December 1890, on Government Register No. 2623/1890.

2. The plans and estimates for the Head Assistant Collector's residence at Bezváda and the Deputy Tahsildár's office at Avanigedda were forwarded to you for sanction of Government under this office No. 8596, dated 22nd November 1890, and No. 6567, dated 8th September 1890.

3. Work on the former can be begun as soon as the plan and estimate is approved; for the latter the issue of the new type designs of offices is required. Meanwhile materials can be collected for both buildings and the allotments utilized.

4. The site plans of the Masulipatam and Guruzala cutcherries have been received from the Executive Engineers and collection of materials can go on for these buildings as well to utilize the allotments.

Resolution—dated 12th February 1891, Mis. No. 958.

Submitted to Government.

2. In para. 2 of G.O., dated 22nd November 1890, No. 7177, Government desired to know whether any portion of the allotments required for the undermentioned buildings could be utilized in the current year:—

		RS.
(a)	Head Assistant Collector's office at Bezváda	8,000
(b)	„ „ „ residence do.	4,000
(c)	Taluk office, Masulipatam	4,000
(d)	Deputy Tahsildar's office, Avanigedda	3,000
(e)	Taluk office, Guruzala	3,000

3. The only one of these buildings for which plans and estimates have been completed is (b), the design of which was submitted to Government with Board's Proceedings, dated 21st January 1891, No. 496; if this is approved, as much money may be allotted to the work as the Public Works Department can spend.

4. (d) was sanctioned in G.O., dated 17th October 1890, No. 809, and (e) was submitted to Government with Board's Proceedings, dated 21st January 1891, No. 498, but in both these cases work cannot be commenced until the revised type design has been approved. It will be for the Public Works Department to say if the collection of materials in advance is advisable.

5. (a) and (e) are not yet ready; but as they too will follow the type design when approved, the Public Works Department might be consulted in their case too if the collection of materials is advisable.

(True copies and Extract.)

(Signed) H. A. SIM,
Ag. Secretary.

No. 1688, Revenue.

Transferred to the Public Works Department with reference to its memo. No. 4436 C., dated 30th October 1890.

2. No action should be taken with reference to the Head Assistant Collector's residence at Bezváda pending sanction of the revised plan and estimate called for in G.O. No. 1603, dated 9th March 1891.

FORT ST. GEORGE,
11th March 1891.

(Signed) C. A. GALTON,
Secretary to Government.

ORDER—dated 25th March 1891, No. 881 W., Public Works.

The official year having almost expired, it is now too late to make any allotments for the works referred to in the Proceedings above recorded.

2. The question of providing funds will be considered on the estimates being sanctioned.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, II Circle.
„ Revenue Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 25th.

Recd. *Encl.*

G.O., 25th Mar. 1891, No. 881 W.

MARCH.

Public Buildings in the Kistna District

Intimating that the question of providing funds for the construction of certain — will be considered on the estimates being sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following paper:—

Office-note from the Examiner, Public Works Accounts, dated Madras, 16th March 1891, No. 1595.

Herewith I submit (by circles) the quarterly reports of completion reports overdue on the 28th February 1891.

2. According to information available, the total number of completion reports certainly overdue on that date was 225, of which 61 were overdue for twelve months and more. Details are shown by circles in the following table:—

Circles.	Number of completion reports due and time overdue.						Total.
	Seven months.	Eight months.	Nine months.	Ten months.	Eleven months.	Twelve and more months.	
I	..	2	8	..	22	17	49
II	12	8	5	5	8	31	69
III	1	..	1	1	1	1	5
IV	6	6	6	2	7	2	29
V	4	2	..	2	4	1	13
VI	13	..	1	1	1	..	16
Consulting Architect	17	6	..	11	1	8	43
Periyár No. I	..	..	..	..	..	1	1
Total ..	53	24	21	22	44	61	225

3. On the whole there is a reduction of 24 as compared with last report. The Ganjam, Nellore and Consulting Architect divisions are those in which the number of overdue completion reports is greatest, the total numbers being 40, 40 and 43, respectively, and these divisions are also the worst as regards completion reports overdue for an abnormal length of time, thus—

—	Eleven months.	Twelve months and more.	Total for eleven months and more.
Ganjam	19	15	34
Nellore	4	23	27
Consulting Architect	...	8	8
Total ...	23	46	69

These three divisions being accountable for 69 out of 105 completion reports overdue for eleven months and more.

4. As far as Ganjam is concerned it appears from the Executive Engineer's remarks that nearly all the abnormal arrears (over eleven months) will be cleared off before the next report is due.

5. In Nellore the abnormal arrears appear to be to some extent due to delay on the part of the revenue authorities in settling compensation. There are seven cases in which the settlement has apparently taken two or three years and eight in which it has taken already at least twelve months, counting in each case only from the *completion* instead of from the beginning of the work. This seems to require attention. Of the remaining 29 cases some ten or twelve will apparently be cleared off by next report.

6. In the Consulting Architect's division there are three or four cases in which the closing of the accounts have been delayed for nearly two years.

7. The following table shows in detail the divisions from which replies have not been received to inquiries made by me regarding works for which it seems probable that completion reports are due and also the number of works concerned in each case:—

Divisions.	Inquiries after the examination of accounts for				Total.
	August 1890.	September 1890.	October 1890.	November 1890.	
Ganjam	..	..	20	24	44
Vizagapatam	..	..	..	8	8
Bellary	..	..	21	21	42
North Arcot	8	..	..	47	55
Negapatam	..	..	..	20	20
Periyár No. I	..	7	2	2	11
Total ..	8	7	43	122	180

The Executive Engineer, North Arcot division, has not yet returned the inquiry list for August 1890, which was forwarded to him on the 8th November 1890, and there is considerable delay in No. I Periyár division.

ORDER—dated 24th March 1891, No. 882 W., Public Works.

Communicated to Superintending Engineers for attention in continuation of G.O. No. 14 W., dated 5th January 1891.

2. Paragraph 5 of the Examiner's office-note, in regard to delay on the part of the Revenue authorities in settling compensation for land, will be considered in the Revenue Department.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers, ⎫
To the Consulting Architect, ⎬ with lists.
„ Superintendent of Works, Periyár Project, ⎭
„ Examiner, Public Works Accounts.
„ Revenue Department.

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 24th.

Recd. *Encl.*

G.O., 24th Mar. 1891, No. 882 W.

MARCH.

Completion Reports

Passing orders on the quarterly report submitted by the Examiner, Public Works Accounts, of — overdue on the 28th February 1891.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following paper :—

From E. J. SEWELL, Esq., Acting Collector of Cuddapah, to the Superintending Engineer, III Circle, dated 16th March 1891, No. 755.

I have the honor to state that the President, Taluk Boards, Pullampet and Sidhout, recommends that the old taluk cutcherry at Badvél may be used for the Local Fund Middle School, Badvél. I therefore request you will be good enough to inform me if that building can be given over for the school-house.

No. 3584.

Referred to the Chief Engineer, Public Works Department. The undersigned knows of no other use the building can be fit to and supports the recommendation.

Bellary,
18th March 1891.

(Signed) H. SMALLEY, Colonel, R.E.,
Superintending Engineer, III Circle.

Order—dated 25th March 1891, No. 883 W., Public Works.

The building may be handed over to the Local Board for the purpose stated on condition that it is kept in repair by the Local Fund Board, and that, should the Government hereafter require the building, it will be surrendered on six months' notice being given.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, III Circle.
" Examiner, Public Works Accounts.
" Local and Municipal Department.
" Revenue Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 25th.

Recd. *Encl.*

G.O., 25th Mar. 1891, No. 883 W.

MARCH.

Old Taluk Cutcherry at Badvel, Cuddapah District

The — transferred to the Local Fund Board with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

Endorsement in the Judicial Department, dated 21st January 1891.
Memorandum from the Judicial Department, dated 9th February 1891.
Endorsement in the Revenue Department, dated 16th March 1891, No. 1836.
Endorsement in the Judicial Department, dated 23rd March 1891.

ORDER—dated 28th March 1891, No. 888 W., Public Works.

The papers recorded above relate to the utilisation of the European prison buildings at Ootacamund on their relinquishment by the Jail Department. Applications have been made for allotment of accommodation as follows:—

2. (1) *Main building.*—Nílgiri Volunteer Rifles apply for this for an orderly-room, armoury, store-rooms, recreation-room, and for drilling in wet weather.

(2) *Surgery in main building.*—The Inspector-General of Jails asks to be allowed to keep this as a record-room in which to lodge the prison records.

(3) *Warders' Quarters (detached buildings 5 or 6)*—

For the Deputy Judge Advocate-General's office	1
For Sergeants attached to the Nílgiri Volunteer Rifles	2
For men of the Quartermaster-General's Department	5
For Apothecary attached to St. Bartholomew's Hospital ...	1
For the Registrar of Assurances	1
Total ...	10

The Inspector-General of Police asks that all the quarters be handed over to him for the Inspector and European Head Constables.

3. It is not clear from the papers before the Government how many detached warders' quarters there are, but it is certain that the requirements are far in excess of the available accommodation. The grant to the Registrar and Apothecary will not give any saving to the State, and is therefore eliminated.

There will be a saving in the Military budget by the occupation of the quarters in cases where rent is now paid for private buildings, and the quarters will be made over to the Military Department to be used as proposed, the distribution in detail being left to His Excellency the Commander-in-Chief, on condition that the repairs are provided for from the Military Works budget and that the quarters are given back if required for civil uses.

4. The surgery will be given over to the Inspector-General of Jails.

5. The application for the buildings required by the Nílgiri Volunteers should be made more specific, and be accompanied by a ground plan of available accommodation. The plan will be supplied by the Superintending Engineer, IV Circle, to the Commandant of the Volunteers, and should have shown on it the position of all the detached buildings belonging to the European prison.

6. The following telegram will be sent to the Quartermaster-General, Ootacamund :—

Deputy Judge Advocate-General's office may move at once into warders' quarters, Ootacamund. Officer in charge of building will accept this order as authority.

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, IV Circle.
" Examiner, Public Works Accounts.
" Military Department.
" Judicial "
" Revenue "

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated March, 28th.

Recd. *Encl.*

G.O., 28th Mar. 1891, No. 888 W.

MARCH.

European Prison Buildings, Ootacamund

Passing orders on the utilisation of — on their relinquishment by the Jail Department.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

TABULAR STATEMENT OF MISCELLANEOUS PROCEEDINGS AND MATTERS OF ROUTINE,

BUILDINGS AND ROADS,

FOR THE MONTH OF MARCH 1891.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Loan to the Kálahasti Zemindar.— Proceedings, Revenue Department, communicating further report of the Collector of North Arcot regarding the grant of —, communicated to the Superintending Engineer, IV Circle.	2nd Mar. 1891, No. 558 W.	......
Mr. J. E. Paul, Executive Engineer.—Ordered that the last pay certificate of — be forwarded to the Home Government.	2nd do. do. No. 559 W.	......
Forwarded	2nd do. do. No. 560 W.	......
English stores.—The local purchase of certain — for the Public Works Workshops, Madras, sanctioned.	2nd do. do. No. 561 W.	......
Major W. L. C. Baddeley, R. E.—Ordered that the last pay certificate of — be forwarded to the Home Government.	2nd do. do. No. 562 W.	......
Forwarded	2nd do. do. No. 563 W.	......
Revised form of muster roll and daily report.—The Government of India requested to send six additional copies of —.	2nd do. do. No. 564 W.	17th Feb. 1891, No. 893 C. 16th Dec. 1890, Nos. 3341-42 W. 10th Oct. 1890, Nos. 2664-65 W.
English stores.—The local purchase of certain — for the Public Works Workshops, sanctioned.	2nd do. do. No. 565 W.	......
Mr. C. J. Ussher, Executive Engineer.—Ordered that the last pay certificate of — be forwarded to the Home Government.	2nd do. do. No. 566 W.	......
Forwarded	2nd do. do. No. 567 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Expenditure on stores in the Madras Public Works Department for 1889-90.—Letter from the Government of India requesting to submit the information asked for in connection with the annual return of —, recorded with reference to G.O., No. 523 W., dated 23rd February 1891.	2nd Mar. 1891, No. 570 W.	23rd Feb. 1891, Nos. 522-23 W. 26th Jan. 1891, No. 430 C. 20th Jan. 1891, No. 330 C. 20th Nov. 1890, No. 4773 C. 3rd Nov. 1890, No. 4506 C. 20th Sept. 1890, No. 3822 C.
Sanitary Engineer in Lower Burma.—Letter from the Government of India furnishing information regarding the allowance, leave, &c., of the appointment of—, communicated to Mr. Watson.	2nd do. do. No. 571 W.	......
Collector's office at Calicut.—Resuming Rs. 4,399 surrendered by the Superintending Engineer, IV Circle, and allotting Rs. 10,000 for the —.	2nd do. do. No. 572 W.	......
Mr. J. P. Davidson, Executive Engineer.—Authorising the Examiner to pass the travelling allowances of — from Madras to Periyár and back.	2nd do. do. No. 573 W.	......
Venkatarama Aiyar.—Regarding exemption of — from the examination rules.	2nd do. do. No. 574 W.	......
Lands in Berhampore.—The Executive Engineer, Ganjam, requested to inspect certain — and to report whether the lands are ordinarily irrigated from any source.	2nd do. do. No. 574-A W.	......
Tahsildar's Cutcherry at Gannavaram, Kistna district.—The Superintending Engineer, III Circle, requested to submit estimates for constructing a —.	2nd do. do. No. 575 W.	......
Transfer of funds.—Passing orders regarding certain — proposed by the Superintending Engineer, I Circle.	2nd do. do. No. 576 W.	21st April 1890, No. 1173 W.
Sluice on the canal bank at Kotipalle, Godávari district.—Proceedings, Local and Municipal Department, requesting the Accountant-General to place Rs. 180 at the disposal of the Public Works Department for building —, communicated to the officers concerned.	2nd do. do. No. 577 W.	......
Examination rules.—Proceedings, Educational Department, exempting Meeran Buksh who acted as Irrigation Superintendent in the Kurnool district from the — from 8th February to September 1889, communicated to officers concerned.	2nd do. do. No. 578 W.	20th Jan. 1891, No. 323 C.
Administration report of the Public Works Department, North-Western Provinces and Oudh, for 1889-90, recorded.	2nd do do. No. 579 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Provincial establishment.—Resuming Rs. 20,000 from the excess provision of Rs. 40,000 under other funds for contribution to — and crediting it to the reserve with the Government under Provincial.	2nd Mar. 1891, No. 580 W.	23rd Jan. 1891, Nos. 211-12 W.
Telegraph Signallers' quarters and Post office at Bangalore.— Sanction of the Government of India to the transfers of certain funds to provide for repairs to the —, communicated to the Examiner, Public Works Accounts, and to the Military Department.	2nd do. do. No. 581 W.	......
Revised and budget estimates for 1890-91 *and* 1891-92.—Letter from the Government of India fixing the 6th March as the latest date up to which information of important modifications of — should reach Calcutta, communicated to officers concerned.	2nd do. do. No. 582 W.	......
Lighthouse at Manapad.—The Superintending Engineer, VI Circle, requested to report whether Rs. 510 allotted for providing a wooden covering ladder for the — would meet the expenditure on the work for the current year.	3rd do. do. No. 583 W.	24th Feb. 1891, No. 538 W. 13th Mar. 1890, No. 831 W. 1st Mar. 1890, No. 1119 C. 25th July 1889, No. 2010 W.
Accountant for the office of the Executive Engineer, North Arcot Division.—The Examiner, Public Works Accounts, directed to post at once a second —.	3rd do. do. No. 584 W.	23rd Feb. 1891, No. 1005 C.
Lighthouse at the Seven Pagodas.—Proceedings, Marine Department, sanctioning Rs. 37 for fitting a bigger door to the store-room of the — than the one at present, communicated to the Superintending Engineer, V Circle.	3rd do. do. No. 585 W.	......
Quarters for Lighthouse-keeper at Point Calimere.—Proceedings, Financial Department, providing additional allotment of Rs. 106 for constructing — and for the new jetty wall at Negapatam.	3rd do. do. No. 587 W.	......
Transfer of funds.—Sanctioning certain — ...	3rd do. do. No. 588 W.	5th Jan. 1891, No. 11 W. 10th July 1890, No. 1877 W.
Water-supply and drainage of Berhampore.—Report of the Sanitary Engineer on the —, communicated to the Superintending Engineer, I Circle.	3rd do. do. No. 589 W.	20th Jan. 1891, No. 183 W. 15th Dec. 1890, No. 3331 W. 21st April 1890, No. 1176 W. 24th Jan. 1890, No. 236 W. 17th Dec. 1889, Nos. 3583-84 W. 26th Jan. 1888, No. 324 W. 4th Dec. 1886, No. 3214 W.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Water-supply of the Lawrence Asylum, Ootacamund.—Directing the value of the iron tank obtained for the — to be debited to "Stock."	3rd Mar. 1891, No. 590 W.	7th Jan. 1889, No. 19 W. 2nd Aug. 1890, No. 2274 W. 30th Jan. 1891, No. 295 W.
Road No. 26 *to Kallimodu, Tanjore District.*—Proceedings, Local and Municipal Department, sanctioning Rs. 530 for raising the — at certain places, communicated to officers concerned.	3rd do. do. No. 591 W.	......
Mr. C. J. Plummer, Overseer.—The grant of Presidency allowance to —, sanctioned.	3rd do. do. No. 592 W.	9th Feb. 1891, No. 696 W.
Ballacut for the Pondugul ferry, Kistna District.—Proceedings, Financial Department, sanctioning Rs. 3,180 for constructing a —, communicated to the Superintending Engineer, II Circle, and the Examiner, Public Works Accounts.	3rd do. do. No. 593 W.	2nd Feb. 1891, No. 308 W.
Mr. Wilson, Executive Engineer.—Permitting — to rejoin for duty at Trichinopoly on return from leave.	3rd do. do. No. 594 W.	13th Feb. 1891, No. 785 C. 7th Jan. 1891, No. 72 C. 17th Dec. 1890, No. 3374 W.
Transfer of Rs. 106 *from grant under Telegraph to Postal, Coimbatore Division.*—Sanctioning the —.	3rd do. do. No. 595 W.	......
Temporary clerk in the Chingleput division.—The employment of a — from 6th January 1891, sanctioned.	3rd do. do. No. 596 W.	19th Feb. 1891, No. 940 C.
Bridge on the Kandavalli road, Godávari District.—Replacing at the disposal of the Financial Department the sum allotted for the iron girder —, and requesting it to be reallotted next official year.	3rd do. do. No. 597 W.	5th Feb. 1891, No. 329 W. 26th Feb. 1891, No. 552 W.
Erratum in G.O., No. 440 W, dated 16th February 1891.	3rd do. do. No. 598 W.	......
Local purchase of certain stationery by the Superintendent, Army Clothing, Madras.—Proceedings, Military Department, communicating orders of the Government of India regarding the — without sanction from Local Government, recorded.	3rd do. do. No. 599 W.	......
Deputy Tahsildar's office and Sub-Jail at Gajapatinagaram, Vizagapatam Division.—Reallotting Rs. 2,500 for constructing a —.	3rd do. do. No. 608 W.	18th Feb. 1891, No. 469 W.
Allotment.—Allotting Rs. 140 to the Tinnevelly division under Tools and Plant.	3rd do. do. No. 609 W.	......
Mr. A. S. Russell, Executive Engineer.—The Superintending Engineer, II Circle, requested to direct — to pay Rs. 1-8-0 into the treasury, the cost of a private telegram classed "State," and to report the payment made.	4th do. do. No. 610 W.	7th Jan. 1887, No. 46 W.
Thalavasal bridge, Salem District.—Resuming and replacing at the disposal of the Local and Municipal Department Rs. 10,000 surrendered from grant for completing the —.	4th do. do. No. 611 W.	24th Oct. 1888, No. 3395 W. 9th Jan. 1891, No. 94 W.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Grant for the Civil Works Sub-division, Ganjam District.—Passing orders regarding the distribution of the — of Rs. 23,000 for the next official year.	4th Mar. 1891, No. 612 W.	13th Feb. 1891, No. 403 W. 5th Jan. 1891, No. 9 W.
Road across the Kistna Anicut at Bezváda.—Proceedings, Local and Municipal Department, sanctioning funds for a —, communicated to the Superintending Engineer, II Circle, and Examiner, Public Works Accounts.	4th do. do. No. 613 W.	29th Oct. 1890, No. 2875 W. 8th Dec. 1890, No. 3259 W. 28th May 1890, No. 1468 W.
Lime.—Estimate of Rs. 5,950 for manufacturing — at Vadheswaram in the Kistna district, sanctioned.	4th do. do. No. 614 W.	14th Oct. 1886, No 686 I. 26th July 1888, Nos. 228-29 W.
Road to Mulliyar head in the Tanjore District.—Proceedings, Local and Municipal Department, sanctioning funds for widening the — from Road No. 23, communicated to the Superintending Engineer, IV Circle.	4th do. do. No. 615 W.	18th Sept. 1890, No. 2495 W. 31st July 1890, No. 2075 W.
Bengal Barrack Regulations.—Letter from the Director-General of Military Works forwarding copies of Parts I and II of a revised edition of appendix M of the —, communicated to officers concerned.	4th do. do. No. 616 W.	......
Surrenders.—Rs. 1,100 surrendered by the Superintending Engineer, V Circle, resumed and credited to the Provincial reserve with the Government.	4th do. do. No. 617 W.	.....
Fifty-five years.—Proceedings, Financial Department, communicating statement of officers in civil establishment who will attain the age of — and laying down the procedure to be followed in future in submitting the returns, recorded.	4th do. do. No. 618 W.	30th April 1890, No. 1246 W.
Suspense Account.—Allotting Rs. 23,000 to cover the debit in the — for 1890-91.	4th do. do. No. 619 W.	......
Vayitri-Gúdalúr Road.—Appropriating Rs. 30,000 for improvements to the —.	4th do. do. No. 619-A. W.	......
Transfer of Funds.—Sanction of the Government of India to the transfer of Rs. 3,385 from the Public Works to the Military Works Department, communicated to the Military Department.	4th do. do No. 620 W.	17th Feb 1891, Nos. 463-64 W. 7th Nov. 1890, No. 2951 W. 13th Nov. 1890, No. 3015 W. 1st Dec. 1890, No. 4965 C. 10th Dec. 1890, No. 5155 C. 19th Dec. 1890, No. 5361 C. 16th Jan. 1891, No. 208 C.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
		(*Continued.*) 7th Nov. 1890, No. 2950 W. 29th Sept. 1890, No. 2859 W. 12th May 1890, No. 1339 W. 11th Feb. 1890, No. 449 W.
Bridges for the Vayitri-Gúdalúr Road.—Telegram to the Director-General of Stores requesting reply to telegram inquiring when the — may be expected.	4th Mar. 1891, No. 620-A W.	6th June 1889, No. 1492 W. 16th July 1890, Nos. 1919-20 W. 12th Sept. 1890, No. 2443 W. 11th Nov. 1890, Nos. 2978-79 W. 24th Nov. 1890, No. 4684 C. 27th Nov. 1890, No. 4910 C. 17th Dec 1890, No. 5293 C. 8th Jan. 1891, Nos. 68-69 W. 2nd Feb 1891, Nos. 309-310 W.
Mr. C. J. K. Watson, Executive Engineer.—Confidential report on —, forwarded to the Government of Bengal.	5th do. do. No. 621 W.	......
Telegraph office at Madras.—Ordered that the Government of India be informed that the indent for cast lead sheeting required for the — should have been classified as Provincial.	5th do. do. No. 623 W.	15th Jan. 1891, Nos. 122-23 W.
The Government of India informed accordingly...	5th do. do. No. 624 W.	......
The Director-General of Stores requested to alter the classification of the indent to Provincial.	5th do. do. No. 625 W.	......
Reports on Native Newspapers for fortnight ending 5th February 1891, recorded	5th do. do. No. 626 W.	......
Surrender of funds.—Resuming certain — made by the Superintending Engineer, I Circle.	5th do. do. No. 627 W.	......
Surrender of Funds.—Resuming certain — made by the Superintending Engineer, I Circle.	5th do. do. No. 628 W.	......
Surrender of funds.—Resuming certain — made by the Superintending Engineer, I Circle.	5th do. do. No. 629 W.	......
Mr. C. J. K. Watson, Executive Engineer.—Confidential report on — for half-year ending 28th February 1891, forwarded to the Government of India.	5th do. do. No. 630 W.	......
Rules regulating temporary work establishment under Executive Engineers.—Ordered that the Government of India be addressed regarding the —.	5th do. do. No. 631 W.	......
The Government of India addressed accordingly.	5th do. do. No 632 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Revised estimate of Incorporated Local Funds for 1890-91.—The Government of India requested to increase the — to Rs. 87,449 and to reduce budget estimate of 1891-92 to Rs. 84,755.	5th Mar. 1891, No. 633 W.	......
Charges for Provincial Works, 1891-92.—The Government of India requested to increase the budget estimate of — by Rs. 23,000.	5th do. do. No. 634 W.	......
Steam Launch for the Narsápur Canal.—The Revenue Department requested to provide Rs. 5,000 for the —.	5th do. do. No. 635 W.	......
Syed Akbar late lock lascar, 1 Circle.—Declining to interfere in the matter of his dismissal for disobedience and for overstaying his leave.	6th do. do. No. 639 W.	......
Plates of Technical Art Series.—Proceedings, Educational Department, stating that certain — received from the Surveyor-General were forwarded to the Public Works Department, communicated to the Consulting Architect to Government.	6th do. do. No. 640 W.	......
Correspondence.—Letter from the Government of India fixing the dates for sending letters and telegrams to Simla.	6th do. do. No. 641 W.	8th Mar. 1890, No. 769 W. 14th Mar 1889, No. 768 W. 12th Mar 1888, No. 814 W.
Lawn tennis Court.—Proceedings, Educational Department, sanctioning Rs. 17-13-0 incurred by Captain Love on the — attached to the Civil Engineering College, Madras, communicated to the Consulting Architect to Government	6th do. do. No. 642 W.	29th Jan. 1891, No. 511 C.
Roman Catholic church at Pallávaram.—Passing orders regarding the irregularity of expenditure in repairing the —.	6th do. do. No. 643 W.	8th Dec. 1890, No. 3251 W. 10th Feb. 1890, No. 435 W. 2nd Sept. 1890, No. 2362 W. 22nd Jan. 1891, No. 365 C.
Grant for Provincial Civil Works.—The Government of India requested to reduce the current year's — to Rs. 26,50,000.	6th do. do. No. 644 W.	9th Jan. 1891, No. 92 W. 10th Feb. 1891, No. 733 W.
Grant for Provincial Civil Works.—Replacing at the disposal of the Financial Department Rs. 2,22,805, the balance of the current year's — which cannot be utilised.	6th do. do. No. 645 W.	......
Taluk office at Ellore, Godávari District.—Resuming Rs. 1,709 surrendered from the current year's grant for constructing a —.	6th do. do. No. 646 W.	11th Nov. 1890, No. 2977 W. 8th Dec. 1890, No. 3257 W. 9th Jan. 1891, No. 96 W.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
		(*Continued.*) 4th Feb 1891, No. 394 W. 16th Feb. 1891, No. 443 W.
Collector's Cutcherry at Tric'inopoly.—Estimate of Rs. 410 for repairing the old —, returned to the Superintending Engineer, VI Circle, for sanction.	6th Mar. 1891, No. 647 W.	8th Dec. 1887, No. 3372 W.
English stores for the Public Works Workshops.—The local purchase of certain —, sanctioned.	6th do. do. No. 650 W.	......
English stores for the Public Works Workshops.—local purchase of certain —, sanctioned.	6th do. do. No. 651 W.	......
Bridge over the Mahasingi river.—Rs. 10,000 surrendered from the current year's grant for the —, resumed and credited to the Provincial reserve with Government.	6th do. do. No. 652 W.	......
Expenses incurred in landing teak logs ex S. S. "Puttiala".—Declining to press the claim against the British India Steam Navigation Company for —.	6th do. do. No. 653 W.	24th Feb. 1891, No. 1042 C.
Párvatipur Jail.—Letter from the Superintending Engineer, I Circle, reporting that the Inspector-General of Jails contemplates new proposals for the — differing from those referred to in G.O., No. 1884 W., dated 11th April 1890, communicated to the Judicial Department.	6th do. do. No. 654 W.	......
Centerings of the Ponniar Bridge.—Proceedings, Local and Municipal Department, stating that the four—available for sale or transfer are not required by any of the Local Boards, communicated to the Superintending Engineer, V Circle.	6th do. do. No. 655 W.	27th Oct. 1890, No. 4353 C.
Jarada estate.—Proceedings of the Court of Wards communicating to the Collector of Ganjam, with instructions, Proceedings, Public Works Department, requesting to allot funds for certain works in the —, communicated to the Superintending Engineer, I Circle, and the Examiner, Public Works Accounts.	6th do. do. No. 656 W.	5th Jan. 1891, No. 18 W.
Estate Works in Ganjam.—Passing orders on application for modification of allotments for —.	6th do. do. No. 657 W.	5th Jan. 1891, No. 18 W. 19th Jan. 1891, No. 171 W.
Bi-monthly return of stores under provision by the Director-General of Stores for India up to 31st January 1891.—Extracts communicated to the Chairman, Harbour Trust Board, and Superintending Engineer, V Circle.	6th do. do. No. 658 W.	......
Captain H. E. Goodwyn, R.E.—Proceedings, Military Department, communicating despatch from the Secretary of State nominating — to join the Chatham course, recorded.	6th do. do. No. 659 W.	22nd Jan. 1891, No. 370 C. 27th Jan. 1891, No. 470 C.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
		(*Continued.*) 3rd Feb. 1891, No. 589 C. 5th Jan. 1891, No. 332 W.
Colored glass for the New Law Courts.—Letter from the Director-General of Stores stating in reply to a reference that the samples sent home to guide the supply of — were not received till 16th January 1881 when steps were taken for purchasing the glass, communicated to the Consulting Architect to Government.	7th Mar. 1891, No. 661 W.	1st Dec. 1890, No. 3192 W. 13th Nov. 1890, Nos. 3001-2 W.
Statement of payments made in England on account of Stores, &c, despatched to India in January 1891, Provincial and Local Funds Public Works, communicated to the officers concerned.	7th do. do. No. 662 W.	30th Jan. 1891, No. 296 W. 8th Jan. 1891, No. 65 W. 11th Dec. 1890, No. 3294 W. 1st Nov. 1890, No. 2886 W. 17th Oct. 1890, No. 2750 W.
Post office at Anantapur.—Allotment of Rs. 127 for improvements to the —, communicated to the Superintending Engineer, III Circle, and the Examiner, Public Works Accounts.	9th do. do. No. 663 W.	......
Storekeeper, No. II, Periyár Division.—The pay of the — increased from Rs. 20 to Rs. 25 from 1st April 1891.	7th do. do. No. 664 W.	......
Transfer of funds.—Sanctioning certain — ...	7th do. do. No. 666 W.	......
Conservation of Archæological Works.—The unutilised balance Rs. 4,110 of the reserve with the Government for the — resumed and credited to the General reserve with the Government under Provincial.	9th do. do. No. 667 W.	......
Red Hills water for carrying out tests for observation of spirits.—Proceedings, Public Department, approving proposal of the Chemical Examiner for the supply of —, communicated to the Consulting Architect to Government.	9th do. do. No. 668 W.	18th April 1888, No. 1170 W. 27th Mar. 1888, No. 994 W. 5th Mar. 1888, No. 919 C.
Nagaruthnam Naicker, Temporary Surveyor.—The Superintending Engineer, III Circle, authorised to grant an advance of one month's pay to — transferred from the permanent establishment.	9th do. do. No. 670 W.	......
Collector's office, Kurnool.—The Superintending Engineer, III Circle, directed to submit plans and estimates for certain improvements to the —.	9th do. do. No. 671 W.	......
Accountant Agadyya Ramayya.—The grant of Presidency allowance to —, sanctioned.	9th do. do. No. 672 W.	......
Salary of late Chinnathumby Pillay, Sub-Engineer, Public Works Department.—Proceedings, Revenue Department, passing orders regarding the disbursement of the —, communicated to the Superintending Engineer, V Circle.	9th do. do. No. 673 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Public Holidays.—Proceedings, Public Department, recording Proceedings of the Board of Revenue regarding the omission of certain — in the Trichinopoly district, communicated to the Superintending Engineer, VI Circle.	9th Mar. 1891, No. 674 W.	5th Dec. 1890, No. 3231 W. 20th Feb 1891, No. 505 W. 21st Aug. 1890, No. 662 D. 18th Nov. 1890, No. 3073 W. 12th Mar. 1888, No. 818 W. 27th Jan. 1891, No. 459 C.
Suspense Accounts of 1890-91.—Making a reduction of Rs. 34,900 in the — and sanctioning a corresponding increase in the Provincial reserve with the Government.	10th do. do. No. 676 W.	......
Unanswered reference list, I Circle.—Permitting the omission of certain references from the future —.	10th do. do. No. 677 W.	6th Aug. 1890, No. 2140 W.
Quarters of the Sergeant Instructor South Indian Railway Volunteers Negapatam.—Allotting Rs. 40 for repairing the —.	10th do. do. No. 678 W.	......
Imperial Civil Works in Madras.—Letter from the Government of India informing that after the surrender of Rs. 832 allotted for the Salt factory at Voyalur, the current year's grant for — will stand at Rs. 27,761, communicated to the Superintending Engineer, V Circle, and the Examiner, Public Works Accounts.	10th do. do. No. 679 W.	......
Sub-Registrar's office building at Negapatam.—The demolition of the old —, sanctioned.	10th do. do. No. 680 W.	21st Jan. 1889, No. 157 W.
Surrenders.—Rs. 3,210 surrendered by the Superintending Engineer, V Circle, resumed and credited to the Provincial reserve with Government.	10th do. do. No. 681 W.	......
Reformatory School at Chingleput.—Explanation of the Superintending Engineer, V Circle, of the delay in submitting estimates for certain works connected with the —, recorded, and copy forwarded to the Judicial Department.	10th do. do. No. 683 W.	12th Mar. 1890, No. 814 W. 2nd Sept 1890, No. 2361 W. 4th Feb. 1891, No. 606 C. 13th Feb. 1891, No. 410 W.
Lock Hospital building at Ranipet.—The demolition of the —. sanctioned.	10th do. do. No. 684 W.	18th April 1890, No. 1144 W. 14th Oct. 1885, No. 2408 W. 23rd Aug. 1881, No. 2089 W.
Raghavendra Naidu, Clerk, IV. class, III grade, Godávari Eastern Division.—Proceedings, Educational Department, permitting — to draw the usual increments until the maximum pay of his grade is reached, communicated to the Superintending Engineer, I Circle.	10th do. do. No. 685 W.	13th Feb. 1891, No. 775 C. 16th April 1888, No. 1135 W.
Mr. Ashpital's journey to Madras on duty from 6th to 9th December 1890, sanctioned.	10th do. do. No. 686 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Lieutenant-Colonel A. C. Smith, R.E.—Investing — with certain additional powers of sanction.	10th Mar. 1891, No. 687 W.	21st Dec. 1888, No. 3999 W.
Hospital Assistant for the Wynaad Sub-division.—Directing to provide the — with free quarters by hire or otherwise and that he cannot be granted compensation in lieu of quarters.	10th do. do. No. 689 W.	20th Feb. 1891, No. 498 W. 5th Feb. 1891, No. 336 W. 23rd Jan. 1891, No. 408 C.
Passed students of the Engineer and Subordinate grades.—Letter from the Government of India forwarding a list of —, recorded.	10th do. do. No. 690 W.	......
Administration and Departmental reports.—Letter from the Government of India forwarding copy of a Despatch from the Secretary of State complaining of the delay in submitting to the Home Government of the several Administration and Departmental reports from the different Provinces, &c., recorded with reference to G.O., No. 338 W., dated 5th February 1891.	10th do. do. No. 691 W.	......
Accident at the Collector's office at Coimbatore.—Report of an — to a cooly on the 19th December 1890, recorded.	10th do. do. No. 692 W.	......
B. Venkata Row, late Clerk, Gódávari Eastern division.—Proceedings, Pension Department, communicating letter from the Government of India declining to grant a pension to —, recorded.	10th do. do. No. 693 W.	......
Colonel W. H. Burton, R.E.—Draft notification (Extract from the London Gazette) relating to the retirement of — returned by the Examiner, Public Works Accounts, as it should be republished by the Military Department, recorded.	10th do do. No. 694 W.	......
Madras Harbour Works.—Memorandum from the Chairman, Harbour Trust Board, requesting to sanction expenditure of Rs. 18,000 for railway materials required for line to obtain stone for revetment north of the —, recorded.	10th do. do. No. 695 W.	27th Feb. 1891, No. 554 W.
District Munsif's Court at Má/kápur.—Report of the Superintending Engineer, III Circle, that nothing can be spent this year on the construction of a —, recorded.	10th do. do. No. 696 W.	20th Feb. 1891, No. 495 W.
Road dam on the A ni-Wandiwash road.—The Superintending Engineer, IV Circle, requested to submit an explanation for surrendering the amount allotted for the —.	11th do. do. No. 697 W.	2nd Nov. 1890, No. 301 W.
Watchman for the Benhope Rest-house on the Ootacamund Kullar road.—The employment of a — from 1st April 1890 to 31st March 1891, sanctioned.	11th do. do. No. 698 W.	......
Mr. J. A. Roe, Acting Store writer, Kurnool division.—Proceedings, Educational Department, temporarily exempting — from the examination rules, communicated to the Superintending Engineer, III Circle.	11th do. do. No. 699 W.	28th Jan. 1891, No. 489 C. 18th Dec. 1890, No. 3376 W. 14th Nov. 1890, No. 4064 C.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Tank on the West side of Government House, Madras.—Estimate of Rs. 13,020 for filling up the —, sanctioned.	11th Mar. 1891, No. 700 W.	......
School house at Anantapur.—Letter from the Superintending Engineer, III Circle, surrendering Rs. 3,000 from the allotment for —, communicated to the Local and Municipal Department.	11th do. do. No. 701 W.	......
Telegraph message sent by the Executive Engineer, North Arcot Division, to his head clerk.—Letter from the Director-General of Telegraphs withdrawing under the circumstances explained the objection to the — on the 11th September 1890, being classed as "State," communicated to the Superintending Engineer, IV Circle, and the Examiner, Public Works Accounts.	11th do. do. No. 702 W.	25th Feb. 1891, Nos. 544-45 W. 28th Jan. 1891, No. 270 W.
Relief works in the Nellore district.—Proceedings, Revenue Department, directing the Collector, in communication with the Public Works Department, to draw up a programme of — and to frame estimates for the works selected to be started without delay when necessary, communicated to the Superintending Engineer, II Circle.	11th do. do. No. 703 W.	......
Period of election for leave rules.—Letter from the Government of India extending the — for Honorary Commissioned officers, Senior Apothecaries and Warrant officers of the Indian Army, recorded with reference to G.O., No. 542 W., dated 24th February 1891.	11th do. do. No. 704 W.	......
Relief work in the Kálahasti Zemindari.—Proceedings, Revenue Department, authorising the Collector of North Arcot to place at the disposal of the Dewan a sum not exceeding Rs. 10,000, for carrying out —, communicated to the Superintending Engineer, IV Circle, for Mr. Watson's guidance.	12th do. do. No. 705 W.	......
Season in Chingleput.—Orders in the Revenue Department on the report of the state of the —, communicated to Superintending Engineer, V Circle.	12th do. do. No. 706 W.	......
Unanswered reference list of the Superintendent of Works, No. 1 Periyár division.—Permitting the omission of certain references from future —.	12th do. do. No. 708 W.	......
Late Chinnathumby Pillay, Sub-Engineer, Public Works Department.—The widow of the —, referred to the Superintending Engineer, V Circle, in reply to her application for the adjustment of her late husband's salary.	12th do. do. No. 709 W.	9th Mar. 1891, No. 673 W.
Cook-house for Light-keepers at Armeghon.—Proceedings, Financial Department, sanctioning Rs 4.8 for constructing a —, communicated to the Superintending Engineer, II Circle, and Examiner, Public Works Accounts.	12th do. do. No. 710 W.	20th May 1890, No. 1424 W. 10th Feb. 1891, No. 379 W. 13th Feb. 1891, No. 766 C. 2nd Mar. 1891, No. 1120 C.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Guaranteed appointments.—Ordered that the Government of India be requested to state whether the scale should be altered in filling up — from date of joining or from 1st April, the date from which the scale has hitherto been held to be increased by such appointments.	12th Mar. 1891, No. 711 W.	3rd Nov. 1890, Nos. 2895-96 W. 5th Jan. 1891, No. 19 W.
The Government of India addressed accordingly.	12th do. do. No. 712 W.	......
District Munsif's Court-house at Karúr.—Proceedings, Public Department, permitting the Revd. H. Little to have the use of the old —, on certain conditions, communicated to the Superintending Engineer, IV Circle.	12th do. do. No. 713 W.	10th Feb. 1891, No. 718 C. 29th Jan. 1891, No. 523 C. 27th Aug. 1888, No. 2630 W. 25th Sept. 1886, No. 2508 W.
Water-supply of Cuddalore.—The temporary survey establishment for surveying for the —, sanctioned.	12th do. do. No. 714 W.	......
Mr. Lambert, Executive Engineer.—Declining to pass the daily allowance claimed by — from 30th September to 2nd October 1889.	12th do. do. No. 715 W.	......
Postage due on certain census papers.—Proceedings, Revenue Department, sanctioning the payment by the District Forest-officer of the —, received by his range officer, communicated to the Examiner, Public Works Accounts.	12th do. do. No. 716 W.	......
Sub-Registrar's office at Musiri.—Estimate for constructing a —, forwarded to the Superintending Engineer, VI Circle, for sanction and execution.	12th do. do. No. 717 W.	24th Sept. 1890, No. 2534 W. 11th Aug. 1890, No. 2177 W.
Potinghi-Koraput Road.—Declining to accept the surrender of Rs. 1,500 from the grant for constructing the —.	13th do. do. No. 725 W.	......
Kálahasti Zemindari.—Orders directing a change of procedure for obtaining funds required for the relief works in the —.	13th do. do. No. 726 W.	......
Bridges for the Vayitri-Gúdalúr Road.—Telegram from the Secretary of State intimating that the — will be sent about the 21st March next, communicated to the Superintending Engineer, IV Circle, with remarks.	13th do. do. No. 727 W.	5th June 1889, No. 1492 W. 6th July 1890, Nos. 1919-20 W. 14th Sept. 1890, No. 740 D. 12th Sept. 1890, Nos. 2443-44 . 11th Nov. 1890, Nos. 297-98 W. 15th Nov. 1890, No. 4684 C. 24th Nov. 1890, No. 4856 C. 27th Nov. 1890, No. 4910. 17th Dec. 1890, No. 5293 C.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
		(*Continued.*) 20th Dec. 1890, No. 5386 C. 8th Jan. 1891, Nos. 68-69 W. 2nd Feb. 1891, No. 309 W. 2nd Feb. 1891, No. 310 W. 4th Mar. 1891, No. $\frac{619}{A}$ W. 4th Mar. 1891, No. $\frac{620}{A}$ W.
Grant to the Kistna Western division.—Declining to accept the proposed surrender of Rs. 200 from the —.	13th Mar. 1891, No. 728 W.	......
Transfer of funds.—Declining to accept certain surrenders made by the Superintending Engineer, III Circle, and sanctioning certain —.	13th do. do. No. 729 W.	......
Surrenders.—Certain sums surrendered by the Superintending Engineer, V Circle, from the current year's grant under Incorporated Local Funds, resumed and replaced at the disposal of the Local and Municipal Department.	13th do. do. No. 730 W.	20th Oct. 1890, No. 2770 W. 20th Dec. 1890, Nos. 3398-99 W. 22nd Nov. 1890, No. 4847 C. 24th Feb. 1891, No. 537 W. 3rd Mar. 1891, No. 591 W.
Mr. C. J. K. Watson, Executive Engineer.—Ordered that the Government of India be informed that — is engaged on famine relief works in Kálahasti which ~~May~~ last till July next and that a further report will be made as to whether his services will be required in this Presidency beyond that date.	13th do. do. No. 731 W.	19th July 1889, No. 1957 W. 10th May. 1890, No. 1317 W. 12th May 1890, No. 1341 W. 2nd June 1890, No. 207 D. 12th June 1890, No. 2624 C.
The Government of India informed accordingly.	13th do. do. No. 732 W.	......
Dates of receipt of accounts for January 1891, *in the office of the Examiner, Public Works Accounts.*—Return showing the —, recorded.	13th do. do. No. 733 W.	......
Mr. Haldwell, District Board Engineer, Nilgiris.—Proceedings, Financial Department, communicating letter from the Accountant-General stating with reference to —, application for contribution according to the new rules for pension only that he should be considered as on Foreign service of the second kind, communicated to the Examiner, Public Works Accounts.	13th do. do. No. 734 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Sub-divisions of the Periyár Division.—The date of the formation of B and C — antedated to 13th February 1889.	13th Mar. 1891, No. 735 W.	16th Feb. 1891, No. 838 C.
Rent for the Collector's residence at Salem.—Ordering to levy the enhanced rate of — from the date on which notice of the increase was served on the Collector by the Executive Engineer.	13th do. do. No. 736 W.	16th Feb. 1891, No. 428 W. 6th Mar. 1891, Nos. 648-49 W.
Mr. J. Hannan, Superintending Engineer, II Circle.—Granting privilege leave for 2 months and 12 days to —, and permitting him to make over charge of his office on the last working day before the Easter holidays either at head-quarters or elsewhere.	13th do. do. No. 737 W.	5th Mar. 1891, No. 1232 C.
Suit brought against the Superintendent of the Nandyar Anicut.—Authorising the defence of the — at the public expense.	13th do. do. No. 738 W.	......
Mr. Mackenzie, Executive Engineer.—The absence of — from his division from the 6th to 21st December 1890, treated as casual leave.	13th do. do. No. 739 W.	......
English Stores.—The local purchase of certain — for No. I Periyár Division, sanctioned.	13th do. do. No. 740 W.	......
Government Publications.— Proceedings, Public Department, directing the sale of all — at the Government Press, communicated to officers of the Public Works Department.	13th do. do. No. 741 W.	......
Kálahasti Zemindari.—The Examiner authorised to grant letters of credit to the extent of Rs. 10,000 to the Executive Engineer, North Arcot Division, on account of relief works in the —.	14th do. do. No. 742 W.	......
"*London Supplies.*"—Providing an additional allotment of Rs. 12,820 for — in the final issue of the Provincial Civil Works Budget for 1891-92.	14th do. do. No. 752 W.	......
Cooum River.—Proceedings, Local and Municipal Department, forwarded to the Chief Engineer with Government for very early remarks Mr. Jones' scheme for improving the —, and directing to carry out the repair of the Napier bridge if found necessary, communicated to the Consulting Architect to Government with remarks.	14th do. do. No. 753 W.	......
V. Kothandapany Mudaliar, Sub-Engineer.—The alteration of the date of birth of — in the service book from August 1836 to August 1839, permitted under the circumstances stated.	14th do. do. No. 754 W.	......
Boat Superintendent at Bezváda.—The employment of a — on Rs. 50 per mensem from 1st April 1891, sanctioned.	14th do. do. No. 755 W.	22nd April 1874, No. 1038. 22nd Aug. 1893, No. 2276 W.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Mr. W. F. Ashpitel, Assistant Engineer.—Ordered that the last-pay certificate of — be forwarded to the Home Government.	14th Mar. 1891, No. 756 W.	......
Forwarded	14th do. do. No. 757 W.	......
Indian Army List.—Pages 615-20 of the —, corrected and returned to the Government of India.	14th do. do. No. 758 W.	......
Inefficiency of the Government Telephonic communication.—The Director-General of Telegraphs requested to state what steps have been taken to remedy the —.	14th do. do. No. 759 W.	19th Nov. 1890, No. 3090 W.
Copy of the above forwarded to the Chief Secretary, Marine Department.	14th do. do. No. 760 W.	......
Muhammad Ali, late Lascar, Kistna Western Division.—Proceedings, Pension Department, sanctioning a pension of Rs. 3-8-0 to —, recorded.	14th do. do. No. 761 W.	.....
Steam Launch for the Narsápur Canal.—The Superintending Engineer, I Circle, informed of the grant of Rs. 5,000 for the —.	14th do. do. No. 761-A W.	28th Nov. 1889, No. 3399 W. 11th Nov. 1890, No. 4643 C. 20th Feb. 1891, No. 503 W. 5th Mar. 1891, No. 635 W.
Tunnel-drilling Machinery.—The Colonial Secretary, Colombo, requested to despatch, as soon as possible, the balance of the — valued at Rs. 7,500.	16th do. do. No. 766 W.	......
Daily payments to Famine Laborers.—Letter from the Superintending Engineer, V Circle, regarding the question of —, recorded with reference to G.O., No. 774 W., dated 17th March 1891.	17th do. do. No. 775 W.	......
Hailstorm.—Report of a terrific — having passed through Belgaum on the nights of the 15th and 17th instant, recorded.	17th do. do. No. 776 W.	......
Draftsman for the Irrigation Office.—According sanction to a — being taken up to Ootacamund.	17th do. do. No. 777 W.	14th Mar. 1887, No. 789 W. 25th May 1887, No. 1415 W. 24th June 1887, No. 1697 W. 7th Mar. 1888, No. 768 W.
Attender for the Public Works Secretariat.—The employment of an additional — on Rs. 12 per mensem from 1st April 1891, sanctioned.	17th do. do. No. 778 W.	31st May 1889, No. 1437 W.
Case of an Upper Subordinate appointed to be in charge of an Executive Engineer's Office.—Letter from the Government of India stating that the — should be dealt with under either article 115 or 142 A, Civil Service Regulations, according to the nature of the charge, communicated to the Superintending Engineer, IV Circle, with reference to the case of Conductor Frankland.	17th do. do. No. 779 W.	17th June 1889, No. 1581 W. 19th Dec. 1890, No 3388 W. 21st July 1890, No. 3126 W. 4th Aug. 1890, No. 3279 C.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
		(*Continued*). 12th Aug. 1890, No. 3378 C. 2nd Mar. 1891, No. 1113 C. 22nd Jan. 1891, Nos. 201-2 W.
Westmere Cottages, Ootacamund.—Fixing the rent of — at Rs. 60 per mensem.	17th Mar. 1891, No. 780 W.	21st Oct. 1886, No. 2771 W. 26th Mar. 1886, No. 841 W. 2nd Mar. 1887, No. 742 C. 22nd Sept. 1888, No. 2981 W. 5th Jan. 1891, No. 10 W.
Statement of Objectionable Items.—Orders on —, V Circle, for period ending 31st December 1890.	17th do. do. No. 781 W.	23rd Feb. 1891, No. 518 W.
Modifications of allotments.—Sanctioning certain —.	17th do. do. No. 782 W.	......
Report on Native newspapers for the fortnight ending 28th February 1891, recorded.	18th do. do. No. 783 W.	......
Fort St. George.—Annual report on — for the year 1890, recorded.	18th do. do. No. 784 W.	......
Service Books.—Proceedings, Pension Department, stating that the explanation of the delay in the verification of the — of the Chingleput and South Arcot Divisions is not satisfactory, communicated to the Superintending Engineer, V Circle.	18th do. do. No. 786 W.	19th Feb. 1891, No. 932 C. 27th Oct. 1890, No. 2841 W. 1st May 1890, No. 2086 C. 13th May 1890, No. 2241 C. 11th June 1890, No. 2592 C. 14th June 1890, No. 1655 W.
Statement of Objectionable Items.—Orders on —, Consulting Architect's Division, up to 31st December 1890.	18th do. do. No. 787 W.	20th Dec. 1890, No. 3406 W. 20th Feb. 1891, No. 497 W.
Statement of Objectionable Items.—Orders on —, IV Circle, up to 31st December 1890.	18th do. do. No. 788 W.	23rd Feb. 1891, No. 517 W. 15th Dec. 1890, No. 2334 W. 8th Oct. 1890, No. 2646 W. 2nd Feb. 1891, No. 309 W.
Statement of Objectionable Items.—Orders on —, I Circle, up to 31st December 1890.	18th do. do. No. 789 W.	21st Jan. 1891, No. 513 W.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Ryves' Canal.—Rs 12,000 sanctioned by the Financial Department for —, replaced at the disposal of that department, as the amount is available and provided from the current year's Public Works grant for Provincial Civil Works.	18th Mar. 1891, No. 790 W.	1st Dec. 1890, No. 700 I. 23rd Jan. 1891, No. $\frac{69\ I.}{A}$
Temporary establishment required for the office of the Examiner, Public Works Accounts.—The — during 1891-92, sanctioned.	18th do. do. No. 791 W.	18th June 1887, No. 1647 W. 21st Sept. 1887, No. 2489 W. 16th Feb. 1888, No. 545 W. 17th May 1889, No. 1318 W. 2nd Oct. 1889, No. 4411 C. 25th Feb. 1890, No 592 W. 7th June 1890, No. 1583 W. 2nd Oct. 1890, No 3965 C.
Correspondence.—The Government requested to despatch to Ootacamund all letters for the Public Works Department which cannot reach Madras by the 4th April.	18th do. do. No. 792 W.	......
Coonoor Drainage Scheme.—Proceedings, Financial Department, sanctioning a loan of Rs. 10,000 and a grant of Rs. 30,000 in aid of the —, communicated to the Superintending Engineer, IV Circle.	18th do. do. No. 793 W.	......
Transfer of Funds.—Sanctioning certain — ...	18th do. do. No. 794 W.	......
Statement of Objectionable Items.—Orders on —, II Circle, up to 31st December 1890.	19th do. do. No. 796 W.	......
Abdus Razzak Sahib, late Delta Superintendent, Kistna Western Division.—Proceedings, Pension Department, granting an invalid pension to —, recorded.	19th do. do. No. 797 W.	......
Palaneandy, late Lascar, Tanjore Division.—Proceedings, Pension Department, granting a gratuity to —, recorded.	19th do. do. No. 798 W.	......
Colonel R. R. E. Drake-Brockman, R.E., Superintending Engineer, IV Circle.—The Examiner of Public Works Accounts' disallowance of the daily allowance claimed by — for the 24th October 1895, upheld.	19th do. do. No. 799 W.	13th Sept. 1890, No. 2453 W.
Famine Relief Works.—Proceedings, Revenue Department, passing orders on programmes of Civil Agency works suitable for — in the several districts of the Madras Presidency for 1890-91.	19th do. do. No. 800 W.	......
Bridge on the Khandavalli Road.—The Superintending Engineer, I Circle, informed that the allotment of Rs. 2,490 sanctioned for the — will be added to the Public Works grant under Incorporated Local Funds for 1891-92.	19th do. do. No. 801 W.	3rd Mar. 1891, No. 597 W. 26th Feb 1891, No. 552 W. 5th Feb. 1891, No. 329 W.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Record Racks for the Kurnool District Court-house.—Report of the — having been supplied and fixed, communicated to the Judicial Department.	19th Mar. 1891, No. 803 W.	19th Dec. 1887, No. 3469 W. 28th Feb. 1888, No. 821 C. 11th Mar. 1889, No 1240 C. 20th Sept. 1889, No. 2616 W. 10th Feb. 1891, No. 386 W.
Jubilee Museum Buildings at Bezváda.—Proceedings, Local and Municipal Department, sanctioning a sum of Rs. 1,225 towards percentage charges for the —, communicated to the Superintending Engineer, II Circle, and the Examiner, Public Works Accounts.	19th do. do. No. 804 W.	6th June 1890, No. 1566 W. 18th July 1890, No. 1965 W. 13th Sept. 1890, No. 2493 W.
Clerk for the Chingleput Division.—Declining to sanction the application for an extra — on account of famine works.	19th do. do. No. 807 W.	19th Mar. 1891, No. 1573 C. 28th Mar. 1890, No. 994 W.
Books of Forms.—The Government of India requested to supply the Consulting Engineer for Railways, Madras, with two copies of the —, referred to in its Public Works Code.	20th do. do. No. 811 W.	......
Books of Forms.—The Consulting Engineer for Railways informed of the application made to the Government of India for the —.	20th do. do. No. 812 W.	......
Periyár Jurisdiction.—Proceedings, Political Department, requesting to know when the notification about the — may be expected, communicated to the Superintendent of Works, Periyár Project.	20th do. do. No 813 W.	3rd Mar. 1891, No 1148 C. 31st Oct. 1890, No. 4462 C. 7th Oct 1890, No. 4004 C. 3rd Sept 1890, No. 2376 W. 1st Aug. 1890, No. 565 D.
Vayitri-Gúdalúr Road.—Allotting Rs. 24,000 for the —.	20th do. do. No. 814 W.	......
Irrigation Works in Trivallur Taluk.—Proceedings, Revenue Department, directing to start some — as famine-relief works, communicated to the Chief Engineer for Irrigation.	20th do. do. No. 815 W.	12th Mar. 1891, No. 706 W.
English Stores.—The local purchase of certain — in the Periyár works, sanctioned.	20th do. do. No. 816 W.	2nd July 1886, No. 1679 W.
Establishment Disallowance Items.—Statement showing — outstanding in the accounts for October 1890, communicated to officers concerned.	20th do. do. No. 817 W.	17th Jan. 1891, No. 156 W. 8th Dec. 1890, No. 3258 W.
List of Public Works Stores.—The Chief Commissioner, Burma, furnished with six additional copies of the — available in this Presidency.	20th do. do. No. 818 W.	18th Oct. 1886, No. 2077 W.
Sub-Registrar's Office at Bimlipatam.—Cancelling the sanction accorded for constructing a —.	20th do. do. No. 819 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Captain H. D. Love, R.E., Principal, College of Engineering, Madras.—Report of having left Madras for England on the 28th ultimo, recorded.	20th Mar. 1891, No. 820 W.	......
Sales of land under Act II of 1864.—Proceedings, Board of Revenue, communicating to all Collectors G.O. communicating opinion of the Advocate-General regarding the powers of Collectors to revise the Divisional officers' orders in regard to —, recorded.	20th do do. No. 821 W.	......
Kálahasti Zemindari.—Proceedings, Revenue Department, recording Proceedings, Public Works Department, deputing Mr. C. J. K. Watson, Executive Engineer, to supervise the improvements to irrigation works in the —, recorded.	20th do. do. No. 822 W.	16th Feb. 1891, No. 425 W.
Standing Order No. 178 of the Board of Revenue.—Proceedings, Board of Revenue, amending — regarding Regulation VI of 1831, recorded.	21st do. do. No. 823 W.	......
Standing Order No. 129 of the Board of Revenue.—Proceedings, Board of Revenue, amending —, regarding pensioners and yeomiahdars, recorded.	21st do. do. No. 824 W.	......
Telephone.— Proceedings, Military Department, communicating order of the Government of India prescribing the procedure for applying for telephone lines in future for Military offices, recorded.	21st do. do. No. 825 W.	......
Location of various Public Works in the Madras Presidency.—Endorsement of the Government of India requesting early reply to letter calling for information regarding the —, recorded with reference to G.O., No. 806 W., dated 19th March 1891.	21st do. do. No. 826 W.	14th Jan. 1891, No. 110 W.
Government of India Public Works Department Circulars issued in 1890.—Abstract of contents of — (for heads of departments), recorded.	21st do. do. No. 831 W.	1st May 1889, No. 1165 W.
Tamaracheruvu Tank.—Proceedings, Revenue Department, recording explanation of the Board of Revenue of the circumstances under which the statement that the Public Works Department was responsible for the non-utilisation of funds allotted for the — was made, recorded.	21st do. do. No. 832 W.	8th Sept. 1890, No. 2414 W.
Government of India Public Works Department Circulars issued in 1890.—Abstract of contents of — (for general distribution), recorded.	21st do. do. No. 833 W.	29th April 1889, No. 1146 W.
"*Place-of-arms*" *by the Madras Infantry Regiment at Vellore.*— Proceedings, Judicial Department, transferring to the Police Department the building occupied as —, communicated to the Superintending Engineer, IV Circle, for information.	21st do. do. No. 834 W.	......
English Articles.—The local purchase of certain —, for the Public Works Workshops, Madras, sanctioned.	21st do. do. No. 835 W.	25th Jan. 1886, No. 202 W. 2nd July 1886, No. 1679 W.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Telephone—The Director-General of Telegraphs informed that there is no objection to acquire the — lines belonging to the Mahant of Tirupati on behalf of Government.	21st Mar. 1891, No. 836 W.	17th Oct. 1889, No. 2924 W. 30th Dec. 1890, No. 5417 C. 12th Feb. 1891, No. 749 C.
Sadananda Pillay, Clerk, Tanjore Division.—Sanctioning, with remarks, the costs incurred by — for prosecuting one Sivaswami Nadar for defamation.	21st do. do. No. 837 W.	8th June 1889, No. 1539 W. 20th Oct. 1890, No. 2783 W. 8th Jan. 1891, No. 84 C.
Staff Sergeant's quarters at Ellore.—Declining to permit a portion of the — to be occupied by Railway subordinates as quarters.	21st do. do. No. 838 W.	......
Gratuitous relief in the North Arcot district.—Proceedings, Revenue Department, sanctioning the distribution of —, communicated to the Superintending Engineer, IV Circle.	21st do. do. No. 839 W.	......
Colonel J. Pennycuick, R.E., Chief Engineer and Secretary to Gorrnment, Public Works Department.—Permitting — to hand over, on proceeding on privilege leave, charge of his office and to resume charge at Madras on return from leave.	21st do. do. No. 840 W.	......
"*Rollers*" *employed in the office of the Examiner, Public Works Accounts.*—The pay of the two —, increased from Rs. 5 to Rs. 6.	21st do. do. No 841 W.	23rd June 1890, No. 1748 W. 21st Aug. 1890, Nos. 2661-62 W. 14th Feb. 1890, Nos. 2180-81 W.
Lighthouse at Manapad.—Letter from the Superintending Engineer, VI Circle, stating that the allotment of Rs. 410 for — is quite sufficient for the current year, recorded.	21st do. do. No. 842 W.	3rd Mar. 1891, No. 583 W.
Correspondence.—Circular from the Government of India, Military Department, specifying the date up to which — is to be sent to Calcutta, recorded.	21st do. do. No. 843 W.	......
Párvatipur Hill Jail.—Proceedings, Judicial Department, regarding preparation estimates for works connected with the —, communicated to the Superintending Engineer, I Circle.	23rd do. do. No. 845 W.	......
Tools in the Cuddapah division.—The unserviceable —, ordered to be sold and replaced by sound articles.	23rd do. do. No. 850 W.	8th Dec. 1883, No. 2453 C. 13th June 1888, No. 1751 W. 7th Nov. 1884, No. 2787 W. 5th June 1890, No. 1552 W.
Colonel S. C. Clarke, R.E.—Ordered that the last pay certificate of — be forwarded to the Home Government.	23rd do. do. No. 851 W.	16th Jan. 1891, No. 191 C.
Forwarded	23rd do. do. No. 852 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
School of Arts, Madras.—Estimate for constructing a tiled shed at the — referred to the Consulting Architect to Government for sanction and early execution.	23rd Mar. 1891, No. 853 W.	......
Muthu Pillai, Draftsman, West Coast Division.—Advance of Rs. 50 to —, sanctioned.	23rd do. do. No. 854 W.	14th Nov. 1889, No. 3224 W. 11th Jan. 1890, No. 71 W. 21st Dec. 1889, Nos. 3645-46 W. 7th Mar. 1891, No. 1277 C. 18th Mar. 1891, No. 1536 C.
Stationery.—The purchase of a bottle of blue endorsing ink for the receipt date stamp of the Public Works Stores' office, sanctioned.	23rd do. do. No. 856 W.	......
Sub-Registrar's office at Madanapalle.—Letter from the Superintending Engineer, III Circle, explaining the necessity for the transfer of Rs. 2,358 from the —, recorded.	23rd do. do. No. 857 W.	10th July 1890, No. 1877 W. 5th Jan. 1891, No. 11 W. 3rd Mar. 1891, No. 588 W.
Overseer Grieff.—Confidential report on — by the Chief Engineer, South Indian Railway, forwarded to the Government of Bengal.	23rd do. do. No. 858 W.	.....
Victoria Gosha Hospital, Madras.—Forwarding six tracings of the plans of the — to the Resident at Hyderabad for the use of His Highness the Nizam's Government.	23rd do. do. No. 859 W.	18th June 1888, No. 1805 W. 9th Aug. 1888, No. 2423 W. 10th July 1890, No. 1833 W. 29th Aug. 1889, No. 3872 C. 26th Nov. 1889, No. 3354 W. 26th Dec. 1889, No. 3659 W. 22nd Jan. 1890, No. 400 C. 5th Feb. 1890, No. 387 W. 14th Nov. 1890, No. 4675 C.
V. Vencatasawmy Iyer, Clerk, Consulting Architect's Office.—Letter from the Consulting Architect to Government explaining why the irregularity of charging the pay of — to Works has not been noticed a long time, recorded.	23rd do. do. No. 860 W.	5th Mar. 1891, No. 1220 C.
Conductor J. Kelly, Supervisor.—Letter from the Superintending Engineer, IV Circle, reporting that the Military papers of — are not forthcoming from any of the divisions in which he served, recorded.	23rd do. do. No. 861 W.	......
Bauloo Naick, late Messenger, Tanjore division.—Proceedings, Pension Department, granting an invalid pension to —, recorded.	23rd do. do. No. 862 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Post offices at Udayagiri and Balliguda.—Letter from the Superintending Engineer, I Circle, stating that the sums surrendered on each of the — is Rs. 1,000, communicated to the Examiner, Public Works Accounts.	23rd Mar. 1891, No. 863 W.	......
Contractor G. Nagiah Naidu.—Report of the Consulting Architect to Government that the fine inflicted on — has not been recovered.	24th do. do. No. 869 W.	12th June 1890, No. 1642 W. 10th June 1890, No. 268 D. 10th July 1890, No. 389 D. 2nd Aug. 1890, No. 2108 W.
Transfer of Funds.—Sanctioning certain — ...	24th do. do. No. 870 W.	......
English Stores.—Application of the Superintending Engineer, IV Circle, for the local purchase of certain —, sanctioned.	24th do. do. No. 871 W.	......
Telegraph office at Madras.—The Director-General of Telegraphs addressed regarding the funds provided for a new iron spiral stair case in the —.	24th do. do. No 872 W.	......
Telephone between the Collector's office and his residence.—The annual charge of Rs. 260 for the —, accepted and directed to be debited to the Revenue Department.	24th do. do. No. 873 W.	19th Feb. 1891, No. 481 W.
Tread Mills at the Penitentiary, Madras.—The existing grant for the —, transferred from the Public Works Workshops to the Consulting Architect's Division.	24th do. do. No. 874 W.	10th July 1890, No. 1877 W. 27th Oct. 1890, No. 2838 W. 20th Dec. 1890, No. 3403 W. 10th Feb. 1891, No. 374 W. 14th Feb. 1891, No. 801 C. 4th May 1891, No. 617 W. 10th Mar. 1891, No. 681 W.
W. Etherajulu Mudaliar, temporary Overseer, V Circle.—Advance of Rs. 80 to —, sanctioned.	24th do. do. No. 875 W.	......
Waterman for the office of the Chief Engineer for Irrigation.—The continued employment during 1891-92 of the — on Re. 1 per mensem, sanctioned.	24th do. do. No. 876 W.	20th May 1890, No. 1422 W. 17th May 1889, No. 1318 W.
Lieutenant J. Lalor, Sub-Engineer.—Advance of a month's pay to — on his transfer, sanctioned as a special case.	24th do. do. No. 877 W.	......
Copper tape for the Public Works Stores' Division, Madras.—Regarding the provision of funds to meet indent for —.	24th do. do. No. 878 W.	13th Mar. 1891, No. 1417 C.
Vizagapatam Division office.—Rent at Rs. 40 per mensem for the building occupied as the —, sanctioned.	24th do. do. No. 879 W.	......

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Transfer of Funds.—The Government of India requested to sanction certain —, allotted for Military Works.	24th Mar. 1891, No. 880 W.	2nd Feb. 1891, No. 309 W.
Messrs. Romilly and Howley, Assistant Engineers.—Letter from the Government of India intimating that — were provided with passages in *Kaisar-i-hind* which was to sail on the 30th October 1890, recorded.	25th do. do. No. 884 W.	2nd Feb. 1891, No. 311 W. 11th July 1890, No. 405 D. 12th June 1890, No. 1627 W. 10th May 1890, No. 1325 W.
Veerappen, late lascar, Tanjore Division.—Proceedings, Pension Department, granting an invalid pension to —, recorded.	25th do. do. No. 885 W.	......
Y. Cundasawmy Gounden, late lascar, North Arcot Division.— Proceedings, Pension Department, granting an invalid pension to —, recorded.	25th do. do. No. 886 W.	......
District Munsif's Court at Aska.—Allotting Rs. 3,600 for constructing a —.	26th do. do. No. 887 W.	......
Mr. DeWinton, Executive Engineer.—Letter from the Government of India intimating that sub. *pro tem.* promotions are not admissible on account of the loan of the services of — to the Military Works Department, as he does not fill any vacancy in that department, communicated, with remarks, to the Examiner, Public Works Accounts.	28th do do. No. 889 W.	16th Oct. 1890, No. 2730 W. 10th Oct. 1890, No. 2661 W. 23rd Oct. 1890, No. 4314 C. 7th Oct. 1890, No. 3995 C. 17th Nov. 1890, No. 4714 C. 1st Dec. 1890, No 4961 C. 18th Nov. 1890, Nos. 3074-75 W. 4th Feb. 1891, No. 594 C.
The Government of India addressed regarding the reversions in consequence of the above ruling.	28th do. do. No. 890 W.	......
Transfers of Funds, V Circle.—Sanctioning certain —.	30th do do. No. 891 W.	......
Cemeteries in the Tranquebar Fort.—Replacing at the disposal of the Financial Department Rs. 250 allotted as an addition to the Public Works grant for repairing two — as the estimate of charges under Provincial Civil Works for 1890-91 having been already fixed, and alloting Rs. 250 from the Public Works reserve under Provincial Civil Works for the repairs.	30th do. do. No. 892 W.	......
Central Jail at Salem.—The reduced grant of Rs. 5,000 for the construction of close prison cells in the —, resumed and credited to the Provincial reserve with the Government.	30th do. do. No. 893 R.	4th Sept. 1890, No. 2381 W. 10th Dec. 1890, No. 5145 C. 6th Jan. 1891, No. 47 C.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
Erratum in para. 2 of G.O., No. 309 W., dated 2nd February 1891.	30th Mar. 1891, No. 894 W.	......
Suit.—Authorising the defence of the — filed by Contractor Mahalinga Juttavallahar in the Negapatam division.	30th do. do. No. 895 W.	......
Kálahasti Zemindari.—Proceedings, Financial Department, sanctioning an additional grant of Rs. 4,000 for the —, communicated to the Examiner, Public Works Accounts, and to the Superintending Engineer, IV Circle, for information.	30th do. do. No. 896 W.	......
Road from Ichápur to Gerada, I Circle.—The Superintending Engineer directed to commence the — without delay.	30th do. do. No. 897 W.	......
Transfer of Funds, IV Circle.—Sanctioning certain —.	31st do. do. No. 898 W.	......
Colonel Pennycuick, R.E., Chief Engineer and Secretary to Government, Public Works Department.—Authorising — to proceed to Jansa and Bombay to inspect the steam launch offered for sale by Messrs. Glover and Co., and if approved to purchase it for the Periyár project.	31st do. do. No. 899 W.	......
Modifications of Allotments, IV Circle.—Declining to sanction certain —.	31st do. do. No. 900 W.	......
Funds for Minor Irrigation Works in Kálahasti Zemindari.—Proceedings, Financial Department, passing orders regarding —, communicated to the Superintending Engineer, IV Circle, and the Examiner, Public Works Department.	31st do. do. No. 901 W.	......
Transfer of Funds.—Telegram from the Government of India sanctioning transfer under Imperial Major Works Rs. 600 to Bakery and Rs 700 to Slaughter-house, Calicut, from allotment for Transport Lines, Calicut, communicated to the Superintending Engineer, IV Circle	31st do. do. No. 902 W.	24th Mar. 1890, No. 880 W. 2nd Feb. 1891, No. 309 W.